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Sequence Listing

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Botstein, David
Desnoyers, Luc
Eaton, Dan L.
Ferrara, Napoleone
Fong, Sherman
Gao, Wei-Qiang
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Godowski, Paul J.
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Hillan, Kenneth J.
Pan, James
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 catggaaaag ataccgcaag tttgcatggg gccatgacga gctgaagcct 850
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<210> 12
 <211> 699
 <212> PRT
 <213> Homo sapiens

<220>
 <221> TRANSMEM
 <222> 21-40 and 84-105
 <223> Transmembrane Domain (type II)

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Val Ala Thr Thr Val Val Met Tyr Pro Pro Pro Pro Pro Pro Pro	35	40	45
His Arg Asp Phe Ile Ser Val Thr Leu Ser Phe Gly Glu Ser Tyr	50	55	60
Asp Asn Ser Lys Ser Trp Arg Arg Arg Ser Cys Trp Arg Lys Trp	65	70	75
Lys Gln Leu Ser Arg Leu Gln Arg Asn Met Ile Leu Phe Leu Leu	80	85	90
Ala Phe Leu Leu Phe Cys Gly Leu Leu Phe Tyr Ile Asn Leu Ala	95	100	105
Asp His Trp Lys Ala Leu Ala Phe Arg Leu Glu Glu Glu Gln Lys	110	115	120
Met Arg Pro Glu Ile Ala Gly Leu Lys Pro Ala Asn Pro Pro Val	125	130	135
Leu Pro Ala Pro Gln Lys Ala Asp Thr Asp Pro Glu Asn Leu Pro	140	145	150
Glu Ile Ser Ser Gln Lys Thr Gln Arg His Ile Gln Arg Gly Pro	155	160	165
Pro His Leu Gln Ile Arg Pro Pro Ser Gln Asp Leu Lys Asp Gly	170	175	180
Thr Gln Glu Glu Ala Thr Lys Arg Gln Glu Ala Pro Val Asp Pro	185	190	195
Arg Pro Glu Gly Asp Pro Gln Arg Thr Val Ile Ser Trp Arg Gly	200	205	210
Ala Val Ile Glu Pro Glu Gln Gly Thr Glu Leu Pro Ser Arg Arg	215	220	225
Ala Glu Val Pro Thr Lys Pro Pro Leu Pro Pro Ala Arg Thr Gln	230	235	240
Gly Thr Pro Val His Leu Asn Tyr Arg Gln Lys Gly Val Ile Asp	245	250	255
Val Phe Leu His Ala Trp Lys Gly Tyr Arg Lys Phe Ala Trp Gly	260	265	270
His Asp Glu Leu Lys Pro Val Ser Arg Ser Phe Ser Glu Trp Phe	275	280	285
Gly Leu Gly Leu Thr Leu Ile Asp Ala Leu Asp Thr Met Trp Ile			

ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED

				290					295					300
Leu	Gly	Leu	Arg	Lys 305	Glu	Phe	Glu	Glu	Ala 310	Arg	Lys	Trp	Val	Ser 315
Lys	Lys	Leu	His	Phe 320	Glu	Lys	Asp	Val	Asp 325	Val	Asn	Leu	Phe	Glu 330
Ser	Thr	Ile	Arg	Ile 335	Leu	Gly	Gly	Leu	Leu 340	Ser	Ala	Tyr	His	Leu 345
Ser	Gly	Asp	Ser	Leu 350	Phe	Leu	Arg	Lys	Ala 355	Glu	Asp	Phe	Gly	Asn 360
Arg	Leu	Met	Pro	Ala 365	Phe	Arg	Thr	Pro	Ser 370	Lys	Ile	Pro	Tyr	Ser 375
Asp	Val	Asn	Ile	Gly 380	Thr	Gly	Val	Ala	His 385	Pro	Pro	Arg	Trp	Thr 390
Ser	Asp	Ser	Thr	Val 395	Ala	Glu	Val	Thr	Ser 400	Ile	Gln	Leu	Glu	Phe 405
Arg	Glu	Leu	Ser	Arg 410	Leu	Thr	Gly	Asp	Lys 415	Lys	Phe	Gln	Glu	Ala 420
Val	Glu	Lys	Val	Thr 425	Gln	His	Ile	His	Gly 430	Leu	Ser	Gly	Lys	Lys 435
Asp	Gly	Leu	Val	Pro 440	Met	Phe	Ile	Asn	Thr 445	His	Ser	Gly	Leu	Phe 450
Thr	His	Leu	Gly	Val 455	Phe	Thr	Leu	Gly	Ala 460	Arg	Ala	Asp	Ser	Tyr 465
Tyr	Glu	Tyr	Leu	Leu 470	Lys	Gln	Trp	Ile	Gln 475	Gly	Gly	Lys	Gln	Glu 480
Thr	Gln	Leu	Leu	Glu 485	Asp	Tyr	Val	Glu	Ala 490	Ile	Glu	Gly	Val	Arg 495
Thr	His	Leu	Leu	Arg 500	His	Ser	Glu	Pro	Ser 505	Lys	Leu	Thr	Phe	Val 510
Gly	Glu	Leu	Ala	His 515	Gly	Arg	Phe	Ser	Ala 520	Lys	Met	Asp	His	Leu 525
Val	Cys	Phe	Leu	Pro 530	Gly	Thr	Leu	Ala	Leu 535	Gly	Val	Tyr	His	Gly 540
Leu	Pro	Ala	Ser	His 545	Met	Glu	Leu	Ala	Gln 550	Glu	Leu	Met	Glu	Thr 555
Cys	Tyr	Gln	Met	Asn 560	Arg	Gln	Met	Glu	Thr 565	Gly	Leu	Ser	Pro	Glu 570
Ile	Val	His	Phe	Asn	Leu	Tyr	Pro	Gln	Pro	Gly	Arg	Arg	Asp	Val

575	580	585
Glu Val Lys Pro	Ala Asp Arg His Asn Leu Leu Arg Pro Glu Thr	
590	595	600
Val Glu Ser Leu	Phe Tyr Leu Tyr Arg Val Thr Gly Asp Arg Lys	
605	610	615
Tyr Gln Asp Trp	Gly Trp Glu Ile Leu Gln Ser Phe Ser Arg Phe	
620	625	630
Thr Arg Val Pro	Ser Gly Gly Tyr Ser Ser Ile Asn Asn Val Gln	
635	640	645
Asp Pro Gln Lys	Pro Glu Pro Arg Asp Lys Met Glu Ser Phe Phe	
650	655	660
Leu Gly Glu Thr	Leu Lys Tyr Leu Phe Leu Leu Phe Ser Asp Asp	
665	670	675
Pro Asn Leu Leu	Ser Leu Asp Ala Tyr Val Phe Asn Thr Glu Ala	
680	685	690
His Pro Leu Pro	Ile Trp Thr Pro Ala	
695		

<210> 13
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 13
 cgccagaagg gcgtgattga cgtc 24

<210> 14
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 14
 ccataccttct tcccagacag gccg 24

<210> 15
 <211> 44
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 15

gaagcctgtg tccaggtcct tcagtgagtg gtttgccctc ggtc 44

<210> 16

<211> 1524

<212> DNA

<213> Homo sapiens

<400> 16

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 cccatgcgcc gccgcctctc cgcacgatgt tcccctcgcg gaggaagcg 100
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 ccctcggaag tgttccgtct tccacctgtt cgtggcctgc ctctcgctgg 200
 gctttctctc cctactctgg ctgcagctca gctgctctgg ggacgtggcc 250
 cgggcagtcg ggggacaagg gcaggagacc tcgggccctc cccgtgcctg 300
 cccccagag ccgccccctg agcaactggga agaagacgca tctgggggcc 350
 cccaccgctt ggcagtgctg gtgcccttcc gcgaacgctt cgaggagctc 400
 ctggtcttcg tgccccacat gcgccgcttc ctgagcagga agaagatccg 450
 gcaccacatc tacgtgctca accaggtgga ccacttcagg ttcaaccggg 500
 cagcgctcat caacgtgggc ttcttgaga gcagcaacag caccgactac 550
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 tggttttctt gaggtgaggc cttccacgt ggctccccg gagctccacc 650
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 cagcactacc ggctgtgcaa tgggatgtcc aaccgcttct ggggctgggg 750
 ccgcgaggac gacgagttct accggcgcat taaggagct gggctccagc 800
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 aaaaaaaaaa aaaaaaaaaa aaaa 1524

<210> 17
 <211> 327
 <212> PRT
 <213> Homo sapiens

<220>
 <221> sig_peptide
 <222> 1-42
 <223> Signal peptide.

<220>
 <221> misc_feature
 <222> 19-25, 65-71, 247-253, 285-291, 303-310
 <223> N-myristoylation site.

<220>
 <221> misc_feature
 <222> 27-31
 <223> cAMP- and cGMP-dependent protein kinase phosphorylation site.

<220>
 <221> TRANSMEM
 <222> 29-49
 <223> Transmembrane domain (type II).

<220>
 <221> misc_feature
 <222> 154-158
 <223> N-glycosylation site.

<220>
 <221> misc_feature
 <222> 226-233
 <223> Tyrosine kinase phosphorylation site.

<400> 17
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 Gly Arg Ser Gly Leu Leu Ser Gly Gly Leu Pro Arg Lys Cys Ser
 20 25 30
 Val Phe His Leu Phe Val Ala Cys Leu Ser Leu Gly Phe Phe Ser
 35 40 45

Leu	Leu	Trp	Leu	Gln 50	Leu	Ser	Cys	Ser	Gly 55	Asp	Val	Ala	Arg	Ala 60
Val	Arg	Gly	Gln	Gly 65	Gln	Glu	Thr	Ser	Gly 70	Pro	Pro	Arg	Ala	Cys 75
Pro	Pro	Glu	Pro	Pro 80	Pro	Glu	His	Trp	Glu 85	Glu	Asp	Ala	Ser	Trp 90
Gly	Pro	His	Arg	Leu 95	Ala	Val	Leu	Val	Pro 100	Phe	Arg	Glu	Arg	Phe 105
Glu	Glu	Leu	Leu	Val 110	Phe	Val	Pro	His	Met 115	Arg	Arg	Phe	Leu	Ser 120
Arg	Lys	Lys	Ile	Arg 125	His	His	Ile	Tyr	Val 130	Leu	Asn	Gln	Val	Asp 135
His	Phe	Arg	Phe	Asn 140	Arg	Ala	Ala	Leu	Ile 145	Asn	Val	Gly	Phe	Leu 150
Glu	Ser	Ser	Asn	Ser 155	Thr	Asp	Tyr	Ile	Ala 160	Met	His	Asp	Val	Asp 165
Leu	Leu	Pro	Leu	Asn 170	Glu	Glu	Leu	Asp	Tyr 175	Gly	Phe	Pro	Glu	Ala 180
Gly	Pro	Phe	His	Val 185	Ala	Ser	Pro	Glu	Leu 190	His	Pro	Leu	Tyr	His 195
Tyr	Lys	Thr	Tyr	Val 200	Gly	Gly	Ile	Leu	Leu 205	Leu	Ser	Lys	Gln	His 210
Tyr	Arg	Leu	Cys	Asn 215	Gly	Met	Ser	Asn	Arg 220	Phe	Trp	Gly	Trp	Gly 225
Arg	Glu	Asp	Asp	Glu 230	Phe	Tyr	Arg	Arg	Ile 235	Lys	Gly	Ala	Gly	Leu 240
Gln	Leu	Phe	Arg	Pro 245	Ser	Gly	Ile	Thr	Thr 250	Gly	Tyr	Lys	Thr	Phe 255
Arg	His	Leu	His	Asp 260	Pro	Ala	Trp	Arg	Lys 265	Arg	Asp	Gln	Lys	Arg 270
Ile	Ala	Ala	Gln	Lys 275	Gln	Glu	Gln	Phe	Lys 280	Val	Asp	Arg	Glu	Gly 285
Gly	Leu	Asn	Thr	Val 290	Lys	Tyr	His	Val	Ala 295	Ser	Arg	Thr	Ala	Leu 300
Ser	Val	Gly	Gly	Ala 305	Pro	Cys	Thr	Val	Leu 310	Asn	Ile	Met	Leu	Asp 315
Cys	Asp	Lys	Thr	Ala 320	Thr	Pro	Trp	Cys	Thr 325	Phe	Ser			

<210> 18
<211> 23
<212> DNA
<<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 18
gcgaacgctt cgaggagtcc tgg 23

<210> 19
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 19
gcagtgcggg aagccacatg gtac 24

<210> 20
<211> 46
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 20
cttctgagc aggaagaaga tccggcacca catctacgtg ctcaac 46

<210> 21
<211> 494
<212> DNA
<213> Homo sapiens

<400> 21
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gactggteggt tgcccagaaa gtctcttctg ccactgacgc ccccatcagg 150
gattgggcct tctttccccc ttctttctg tgtctctgct ctcacggcc 200
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taaacagtta aaagctgaaa aaaaaaaaaa aaaaaaaaaa aaaa 494

<210> 22
<211> 73
<212> PRT
<213> Homo sapiens

<220>
<221> sig_peptide
<222> 1-15
<223> Signal peptide.

<220>
<221> misc_feature
<222> 3-18
<223> Growth factor and cytokines receptors family.

<400> 22
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20 25 30
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35 40 45
Phe Leu Cys Leu Leu Pro His Arg Pro Ala Met Thr Cys Ser Gln
50 55 60
Ala Gln Pro Arg Gly Glu Gly Glu Lys Val Gly Asp Gly
65 70

<210> 23
<211> 2883
<212> DNA
<213> Homo sapiens

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<210> 24
 <211> 616
 <212> PRT
 <213> Homo sapiens

<220>
 <221> sig_peptide
 <222> 1-33
 <223> Signal peptide.

<220>
 <221> TRANSMEM
 <222> 13-40
 <223> Transmembrane domain (type II).

[Faint, illegible markings]

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Leu	Leu	Pro	Leu	Ser	Leu	Leu	Ala	Leu	Leu	Ala	Leu	Leu	Gly
				20					25				30
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Asp	Gly	Arg	Pro	Arg	Gly	Ala	Gly	Arg	Ala	Ala	Gly	Ala	Ala
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Gly	Lys	Val	Val	Cys	Ser	Ser	Leu	Glu	Leu	Ala	Gln	Val	Leu
				65					70				75
Pro	Asp	Thr	Leu	Pro	Asn	Arg	Thr	Val	Thr	Leu	Ile	Leu	Ser
				80					85				90
Asn	Lys	Ile	Ser	Glu	Leu	Lys	Asn	Gly	Ser	Phe	Ser	Gly	Leu
				95					100				105
Leu	Leu	Glu	Arg	Leu	Asp	Leu	Arg	Asn	Asn	Leu	Ile	Ser	Ser
				110					115				120
Asp	Pro	Gly	Ala	Phe	Trp	Gly	Leu	Ser	Ser	Leu	Lys	Arg	Leu
				125					130				135
Leu	Thr	Asn	Asn	Arg	Ile	Gly	Cys	Leu	Asn	Ala	Asp	Ile	Phe
				140					145				150
Gly	Leu	Thr	Asn	Leu	Val	Arg	Leu	Asn	Leu	Ser	Gly	Asn	Leu
				155					160				165
Ser	Ser	Leu	Ser	Gln	Gly	Thr	Phe	Asp	Tyr	Leu	Ala	Ser	Leu
				170					175				180
Ser	Leu	Glu	Phe	Gln	Thr	Glu	Tyr	Leu	Leu	Cys	Asp	Cys	Asn
				185					190				195
Leu	Trp	Met	His	Arg	Trp	Val	Lys	Glu	Lys	Asn	Ile	Thr	Val
				200					205				210
Asp	Thr	Arg	Cys	Val	Tyr	Pro	Lys	Ser	Leu	Gln	Ala	Gln	Pro
				215					220				225
Thr	Gly	Val	Lys	Gln	Glu	Leu	Leu	Thr	Cys	Asp	Pro	Pro	Leu
				230					235				240
Leu	Pro	Ser	Phe	Tyr	Met	Thr	Pro	Ser	His	Arg	Gln	Val	Val
				245					250				255
Glu	Gly	Asp	Ser	Leu	Pro	Phe	Gln	Cys	Met	Ala	Ser	Tyr	Ile
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Gln	Asp	Met	Gln	Val	Leu	Trp	Tyr	Gln	Asp	Gly	Arg	Ile	Val
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[illegible]

SECRET

Ser

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<211> 24
<212> DNA
<213> Artificial Sequence
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<223> Synthetic oligonucleotide probe

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<212> DNA
<213> Artificial Sequence
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<211> 683
<212> DNA
<213> Homo sapiens
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gcagaggctt cgtgagggag ttatcagaga cattgagagg caaatcggga 150
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 <213> Homo sapiens
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 <223> Signal peptide.

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 35 40 45
 Ile Arg Lys Lys Glu Asn Ile Arg Leu Leu Gly Glu Gln Ile Ile
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 Lys Gly Ser Gln Lys Ser
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<210> 30
 <211> 2128
 <212> DNA
 <213> Homo sapiens

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<400> 30

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 actgcaaccc ccgcctcctg ggttcaagcg attctcctcc cccagcctcc 1500
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 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Ser Thr Cys Val Ala Phe Ser Leu Val Ala Ser Val Gly Ala Trp
 50 55 60
 Thr Gly Ser Met Gly Asn Trp Ser Met Phe Thr Trp Cys Phe Cys
 65 70 75
 Phe Ser Val Thr Leu Ile Ile Leu Ile Val Glu Leu Cys Gly Leu
 80 85 90
 Gln Ala Arg Phe Pro Leu Ser Trp Arg Asn Phe Pro Ile Thr Phe
 95 100 105

Ala Cys Tyr Ala	Ala Leu Phe Cys Leu Ser Ala Ser Ile Ile Tyr	110	115	120
Pro Thr Thr Tyr	Val Gln Phe Leu Ser His Gly Arg Ser Arg Asp	125	130	135
His Ala Ile Ala	Ala Thr Phe Phe Ser Cys Ile Ala Cys Val Ala	140	145	150
Tyr Ala Thr Glu	Val Ala Trp Thr Arg Ala Arg Pro Gly Glu Ile	155	160	165
Thr Gly Tyr Met	Ala Thr Val Pro Gly Leu Leu Lys Val Leu Glu	170	175	180
Thr Phe Val Ala	Cys Ile Ile Phe Ala Phe Ile Ser Asp Pro Asn	185	190	195
Leu Tyr Gln His	Gln Pro Ala Leu Glu Trp Cys Val Ala Val Tyr	200	205	210
Ala Ile Cys Phe	Ile Leu Ala Ala Ile Ala Ile Leu Leu Asn Leu	215	220	225
Gly Glu Cys Thr	Asn Val Leu Pro Ile Pro Phe Pro Ser Phe Leu	230	235	240
Ser Gly Leu Ala	Leu Leu Ser Val Leu Leu Tyr Ala Thr Ala Leu	245	250	255
Val Leu Trp Pro	Leu Tyr Gln Phe Asp Glu Lys Tyr Gly Gly Gln	260	265	270
Pro Arg Arg Ser	Arg Asp Val Ser Cys Ser Arg Ser His Ala Tyr	275	280	285
Tyr Val Cys Ala	Trp Asp Arg Arg Leu Ala Val Ala Ile Leu Thr	290	295	300
Ala Ile Asn Leu	Leu Ala Tyr Val Ala Asp Leu Val His Ser Ala	305	310	315
His Leu Val Phe	Val Lys Val	320		

<210> 32
 <211> 3680
 <212> DNA
 <213> Homo sapiens

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ttcccaggtg gtgaaggacc acgtgaccaa gcctaccgcc atggcccagg 1650
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 <211> 335
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 His Met Asp Pro Asn Tyr Cys His Pro Ser Thr Ser Leu His Leu
 50 55 60
 Cys Ser Leu Ala Trp Ser Phe Thr Arg Leu Leu His Pro Pro Leu
 65 70 75
 Ser Pro Gly Ile Ser Gln Val Val Lys Asp His Val Thr Lys Pro
 80 85 90
 Thr Ala Met Ala Gln Gly Arg Val Ala His Leu Ile Glu Trp Lys
 95 100 105
 Gly Trp Ser Lys Pro Ser Asp Ser Pro Ala Ala Leu Glu Ser Ala
 110 115 120

Phe Ser Ser Tyr Ser Asp Leu Ser Glu Gly Glu Gln Glu Ala Arg
125 130 135

Phe Ala Ala Gly Val Ala Glu Gln Phe Ala Ile Ala Glu Ala Lys
140 145 150

Leu Arg Ala Trp Ser Ser Val Asp Gly Glu Asp Ser Thr Asp Asp
155 160 165

Ser Tyr Asp Glu Asp Phe Ala Gly Gly Met Asp Thr Asp Met Ala
170 175 180

Gly Gln Leu Pro Leu Gly Pro His Leu Gln Asp Leu Phe Thr Gly
185 190 195

His Arg Phe Ser Arg Pro Val Arg Gln Gly Ser Val Glu Pro Glu
200 205 210

Ser Asp Cys Ser Gln Thr Val Ser Pro Asp Thr Leu Cys Ser Ser
215 220 225

Leu Cys Ser Leu Glu Asp Gly Leu Leu Gly Ser Pro Ala Arg Leu
230 235 240

Ala Ser Gln Leu Leu Gly Asp Glu Leu Leu Leu Ala Lys Leu Pro
245 250 255

Pro Ser Arg Glu Ser Ala Phe Arg Ser Leu Gly Pro Leu Glu Ala
260 265 270

Gln Asp Ser Leu Tyr Asn Ser Pro Leu Thr Glu Ser Cys Leu Ser
275 280 285

Pro Ala Glu Glu Glu Pro Ala Pro Cys Lys Asp Cys Gln Pro Leu
290 295 300

Cys Pro Pro Leu Thr Gly Ser Trp Glu Arg Gln Arg Gln Ala Ser
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<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 34

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<220>
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<210> 36
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<220>
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<400> 36
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<210> 37
 <211> 23
 <212> DNA
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<220>
 <223> Synthetic oligonucleotide probe

<400> 37
 ggcgagccct aactatccag gag 23

<210> 38
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<400> 38
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<210> 40
 <211> 2084

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<210> 43

<211> 263

<212> PRT

<213> Homo sapiens

<400> 43

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Thr	Gln	Ile	Leu	Thr	Gly	Lys	Glu	Leu	Arg	Val	Ala	Thr	Gln	Glu	35	40	45	
Lys	Glu	Gly	Ser	Ser	Gly	Arg	Cys	Met	Leu	Thr	Leu	Leu	Gly	Leu	50	55	60	
Ser	Phe	Ile	Leu	Ala	Gly	Leu	Ile	Val	Gly	Gly	Ala	Cys	Ile	Tyr	65	70	75	
Lys	Tyr	Phe	Met	Pro	Lys	Ser	Thr	Ile	Tyr	Arg	Gly	Glu	Met	Cys	80	85	90	
Phe	Phe	Asp	Ser	Glu	Asp	Pro	Ala	Asn	Ser	Leu	Arg	Gly	Gly	Glu	95	100	105	
Pro	Asn	Phe	Leu	Pro	Val	Thr	Glu	Glu	Ala	Asp	Ile	Arg	Glu	Asp	110	115	120	
Asp	Asn	Ile	Ala	Ile	Ile	Asp	Val	Pro	Val	Pro	Ser	Phe	Ser	Asp	125	130	135	
Ser	Asp	Pro	Ala	Ala	Ile	Ile	His	Asp	Phe	Glu	Lys	Gly	Met	Thr	140	145	150	
Ala	Tyr	Leu	Asp	Leu	Leu	Leu	Gly	Asn	Cys	Tyr	Leu	Met	Pro	Leu	155	160	165	
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Gly	Lys	Leu	Ala	Ser	Gly	Arg	Tyr	Leu	Pro	Gln	Thr	Tyr	Val	Val	185	190	195	
Arg	Glu	Asp	Leu	Val	Ala	Val	Glu	Glu	Ile	Arg	Asp	Val	Ser	Asn	200	205	210	
Leu	Gly	Ile	Phe	Ile	Tyr	Gln	Leu	Cys	Asn	Asn	Arg	Lys	Ser	Phe	215	220	225	
Arg	Leu	Arg	Arg	Arg	Asp	Leu	Leu	Leu	Gly	Phe	Asn	Lys	Arg	Ala				

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Val Glu Thr Lys Ile Cys Gln Glu					
	260				

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 <223> Synthetic oligonucleotide probe

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<210> 45
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 45
 gggaactgct atctgatgcc 20

<210> 46
 <211> 26
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 46
 caggatctcc tcttgca gtc tgcagc 26

<210> 47
 <211> 28
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 47
 cttctcgaac cacataagtt tgaggcag 28

<210> 48
 <211> 25
 <212> DNA
 <213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 48

cacgattccc tccacagcaa ctggg 25

<210> 49

<211> 1969

<212> DNA

<213> Homo sapiens

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Lys Gln Lys Ala Ser Ala Tyr Tyr Pro Ser Ser Phe Pro Lys Lys	125		130		135
Lys Tyr Val Asp Gln Ser Asp Arg Ala Gly Gly Pro Arg Ala Phe	140		145		150
Ser Glu Val Pro Asp Arg Ala Pro Asp Ser Arg Pro Glu Glu Ala	155		160		165
Leu Asp Ser Ser Arg Gln Leu Gln Ala Asp Ile Leu Ala Ala Thr	170		175		180
Gln Asn Leu Lys Ser Pro Thr Arg Ala Ala Leu Gly Gly Gly Asp	185		190		195
Gly Ala Arg Met Val Glu Gly Arg Gly Ala Glu Glu Glu Glu Lys	200		205		210
Gly Ser Gln Glu Gly Asp Gln Glu Val Gln Gly His Gly Val Pro	215		220		225
Val Glu Thr Pro Glu Ala Gln Glu Glu Pro Cys Ser Gly Val Leu	230		235		240
Glu Gly Ala Val Val Ala Gly Glu Gly Gln Gly Glu Leu Glu Gly	245		250		255
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 aataaatggt tagtcttccc tgtaaaa 4277

<210> 58
 <211> 1115
 <212> PRT
 <213> Homo sapiens

<400> 58
 Met Leu Arg Gly Thr Met Thr Ala Trp Arg Gly Met Arg Pro Glu
 1 5 10 15
 Val Thr Leu Ala Cys Leu Leu Leu Ala Thr Ala Gly Cys Phe Ala
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 Asp Leu Asn Glu Val Pro Gln Val Thr Val Gln Pro Ala Ser Thr
 35 40 45
 Val Gln Lys Pro Gly Gly Thr Val Ile Leu Gly Cys Val Val Glu
 50 55 60
 Pro Pro Arg Met Asn Val Thr Trp Arg Leu Asn Gly Lys Glu Leu
 65 70 75
 Asn Gly Ser Asp Asp Ala Leu Gly Val Leu Ile Thr His Gly Thr
 80 85 90

Leu	Val	Ile	Thr	Ala	Leu	Asn	Asn	His	Thr	Val	Gly	Arg	Tyr	Gln
				95					100					105
Cys	Val	Ala	Arg	Met	Pro	Ala	Gly	Ala	Val	Ala	Ser	Val	Pro	Ala
				110					115					120
Thr	Val	Thr	Leu	Ala	Asn	Leu	Gln	Asp	Phe	Lys	Leu	Asp	Val	Gln
				125					130					135
His	Val	Ile	Glu	Val	Asp	Glu	Gly	Asn	Thr	Ala	Val	Ile	Ala	Cys
				140					145					150
His	Leu	Pro	Glu	Ser	His	Pro	Lys	Ala	Gln	Val	Arg	Tyr	Ser	Val
				155					160					165
Lys	Gln	Glu	Trp	Leu	Glu	Ala	Ser	Arg	Gly	Asn	Tyr	Leu	Ile	Met
				170					175					180
Pro	Ser	Gly	Asn	Leu	Gln	Ile	Val	Asn	Ala	Ser	Gln	Glu	Asp	Glu
				185					190					195
Gly	Met	Tyr	Lys	Cys	Ala	Ala	Tyr	Asn	Pro	Val	Thr	Gln	Glu	Val
				200					205					210
Lys	Thr	Ser	Gly	Ser	Ser	Asp	Arg	Leu	Arg	Val	Arg	Arg	Ser	Thr
				215					220					225
Ala	Glu	Ala	Ala	Arg	Ile	Ile	Tyr	Pro	Pro	Glu	Ala	Gln	Thr	Ile
				230					235					240
Ile	Val	Thr	Lys	Gly	Gln	Ser	Leu	Ile	Leu	Glu	Cys	Val	Ala	Ser
				245					250					255
Gly	Ile	Pro	Pro	Pro	Arg	Val	Thr	Trp	Ala	Lys	Asp	Gly	Ser	Ser
				260					265					270
Val	Thr	Gly	Tyr	Asn	Lys	Thr	Arg	Phe	Leu	Leu	Ser	Asn	Leu	Leu
				275					280					285
Ile	Asp	Thr	Thr	Ser	Glu	Glu	Asp	Ser	Gly	Thr	Tyr	Arg	Cys	Met
				290					295					300
Ala	Asp	Asn	Gly	Val	Gly	Gln	Pro	Gly	Ala	Ala	Val	Ile	Leu	Tyr
				305					310					315
Asn	Val	Gln	Val	Phe	Glu	Pro	Pro	Glu	Val	Thr	Met	Glu	Leu	Ser
				320					325					330
Gln	Leu	Val	Ile	Pro	Trp	Gly	Gln	Ser	Ala	Lys	Leu	Thr	Cys	Glu
				335					340					345
Val	Arg	Gly	Asn	Pro	Pro	Pro	Ser	Val	Leu	Trp	Leu	Arg	Asn	Ala
				350					355					360
Val	Pro	Leu	Ile	Ser	Ser	Gln	Arg	Leu	Arg	Leu	Ser	Arg	Arg	Ala
				365					370					375

Leu Arg Val Leu Ser Met Gly Pro Glu Asp Glu Gly Val Tyr Gln
 380 385 390
 Cys Met Ala Glu Asn Glu Val Gly Ser Ala His Ala Val Val Gln
 395 400 405
 Leu Arg Thr Ser Arg Pro Ser Ile Thr Pro Arg Leu Trp Gln Asp
 410 415 420
 Ala Glu Leu Ala Thr Gly Thr Pro Pro Val Ser Pro Ser Lys Leu
 425 430 435
 Gly Asn Pro Glu Gln Met Leu Arg Gly Gln Pro Ala Leu Pro Arg
 440 445 450
 Pro Pro Thr Ser Val Gly Pro Ala Ser Pro Lys Cys Pro Gly Glu
 455 460 465
 Lys Gly Gln Gly Ala Pro Ala Glu Ala Pro Ile Ile Leu Ser Ser
 470 475 480
 Pro Arg Thr Ser Lys Thr Asp Ser Tyr Glu Leu Val Trp Arg Pro
 485 490 495
 Arg His Glu Gly Ser Gly Arg Ala Pro Ile Leu Tyr Tyr Val Val
 500 505 510
 Lys His Arg Lys Gln Val Thr Asn Ser Ser Asp Asp Trp Thr Ile
 515 520 525
 Ser Gly Ile Pro Ala Asn Gln His Arg Leu Thr Leu Thr Arg Leu
 530 535 540
 Asp Pro Gly Ser Leu Tyr Glu Val Glu Met Ala Ala Tyr Asn Cys
 545 550 555
 Ala Gly Glu Gly Gln Thr Ala Met Val Thr Phe Arg Thr Gly Arg
 560 565 570
 Arg Pro Lys Pro Glu Ile Met Ala Ser Lys Glu Gln Gln Ile Gln
 575 580 585
 Arg Asp Asp Pro Gly Ala Ser Pro Gln Ser Ser Ser Gln Pro Asp
 590 595 600
 His Gly Arg Leu Ser Pro Pro Glu Ala Pro Asp Arg Pro Thr Ile
 605 610 615
 Ser Thr Ala Ser Glu Thr Ser Val Tyr Val Thr Trp Ile Pro Arg
 620 625 630
 Gly Asn Gly Gly Phe Pro Ile Gln Ser Phe Arg Val Glu Tyr Lys
 635 640 645
 Lys Leu Lys Lys Val Gly Asp Trp Ile Leu Ala Thr Ser Ala Ile
 650 655 660

FOIA b 7 - D

Val Gly Tyr Pro Gly Met Lys Pro Gln Gln His Cys Pro Gly Glu
950 955 960

Leu Gln Gln Gln Ser Asp Thr Ser Ser Leu Leu Arg Gln Thr His
965 970 975

Leu Gly Asn Gly Tyr Asp Pro Gln Ser His Gln Ile Thr Arg Gly
980 985 990

Pro Lys Ser Ser Pro Asp Glu Gly Ser Phe Leu Tyr Thr Leu Pro
995 1000 1005

Asp Asp Ser Thr His Gln Leu Leu Gln Pro His His Asp Cys Cys
1010 1015 1020

Gln Arg Gln Glu Gln Pro Ala Ala Val Gly Gln Ser Gly Val Arg
1025 1030 1035

Arg Ala Pro Asp Ser Pro Val Leu Glu Ala Val Trp Asp Pro Pro
1040 1045 1050

Phe His Ser Gly Pro Pro Cys Cys Leu Gly Leu Val Pro Val Glu
1055 1060 1065

Glu Val Asp Ser Pro Asp Ser Cys Gln Val Ser Gly Gly Asp Trp
1070 1075 1080

Cys Pro Gln His Pro Val Gly Ala Tyr Val Gly Gln Glu Pro Gly
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1100 1105 1110

Pro Pro Leu Thr Ile
1115

<210> 59
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 59
gggaaacaca gcagtcattg cctgc 25

<210> 60
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 60
gcacacgtag cctgtcgctg gagc 24

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 atcttctccc actcagctgc cagagctgtg tgtgacaatt tgttgaatgt 1000
 tcccgatgat atcctgcagc ttctgaagaa cgggtggcatc gtgatgggtga 1050
 cactgtccat ggggggtgctg cagtgaacc tgcttgctaa cgtgtccact 1100
 gtggcagatc actttgacca catcaggga gtcattggat ctgagttcat 1150
 cgggattggt ggaaattatg acgggactgg ccggttcctc caggggcttg 1200
 aggatgtgtc cacataccca gtcctgatag aggagttgct gagtcgtasc 1250
 tggagcgagg aagagcttca aggtgtcctt cgtggaaacc tgctgcgggt 1300
 cttcagacaa gtggaaaagg tgagagagga gagcagggcg cagagccccg 1350
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 ttccaggcct tgtggctgct gccaccatcc caaccttcac ccagtggctc 1550
 tgctgacaca gtcgggtccc gcagaggtca ctgtggcaaa gcctcacaaa 1600
 gccccctctc ctagttcatt cacaagcata tgctgagaat aaacatgtta 1650
 cacatggaaa a 1661

<210> 63
 <211> 487
 <212> PRT
 <213> Homo sapiens

<220>
 <221> unsure
 <222> 196, 386
 <223> unknown amino acid

<400> 63
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 Tyr Leu Arg Arg Leu Leu Leu Leu Leu Leu Leu Leu Arg
 20 25 30
 Gln Pro Val Thr Arg Ala Glu Thr Thr Pro Gly Ala Pro Arg Ala
 35 40 45
 Leu Ser Thr Leu Gly Ser Pro Ser Leu Phe Thr Thr Pro Gly Val
 50 55 60

Pro	Ser	Ala	Leu	Thr	Thr	Pro	Gly	Leu	Thr	Thr	Pro	Gly	Thr	Pro	75
				65						70					
Lys	Thr	Leu	Asp	Leu	Arg	Gly	Arg	Ala	Gln	Ala	Leu	Met	Arg	Ser	90
				80					85						
Phe	Pro	Leu	Val	Asp	Gly	His	Asn	Asp	Leu	Pro	Gln	Val	Leu	Arg	105
				95					100						
Gln	Arg	Tyr	Lys	Asn	Val	Leu	Gln	Asp	Val	Asn	Leu	Arg	Asn	Phe	120
				110					115						
Ser	His	Gly	Gln	Thr	Ser	Leu	Asp	Arg	Leu	Arg	Asp	Gly	Leu	Val	135
				125					130						
Gly	Ala	Gln	Phe	Trp	Ser	Ala	Ser	Val	Ser	Cys	Gln	Ser	Gln	Asp	150
				140					145						
Gln	Thr	Ala	Val	Arg	Leu	Ala	Leu	Glu	Gln	Ile	Asp	Leu	Ile	His	165
				155					160						
Arg	Met	Cys	Ala	Ser	Tyr	Ser	Glu	Leu	Glu	Leu	Val	Thr	Ser	Ala	180
				170					175						
Glu	Gly	Leu	Asn	Ser	Ser	Gln	Lys	Leu	Ala	Cys	Leu	Ile	Gly	Val	195
				185					190						
Xaa	Gly	Gly	His	Ser	Leu	Asp	Ser	Ser	Leu	Ser	Val	Leu	Arg	Ser	210
				200					205						
Phe	Tyr	Val	Leu	Gly	Val	Arg	Tyr	Leu	Thr	Leu	Thr	Phe	Thr	Cys	225
				215					220						
Ser	Thr	Pro	Trp	Ala	Glu	Ser	Ser	Thr	Lys	Phe	Arg	His	His	Met	240
				230					235						
Tyr	Thr	Asn	Val	Ser	Gly	Leu	Thr	Ser	Phe	Gly	Glu	Lys	Val	Val	255
				245					250						
Glu	Glu	Leu	Asn	Arg	Leu	Gly	Met	Met	Ile	Asp	Leu	Ser	Tyr	Ala	270
				260					265						
Ser	Asp	Thr	Leu	Ile	Arg	Arg	Val	Leu	Glu	Val	Ser	Gln	Ala	Pro	285
				275					280						
Val	Ile	Phe	Ser	His	Ser	Ala	Ala	Arg	Ala	Val	Cys	Asp	Asn	Leu	300
				290					295						
Leu	Asn	Val	Pro	Asp	Asp	Ile	Leu	Gln	Leu	Leu	Lys	Asn	Gly	Gly	315
				305					310						
Ile	Val	Met	Val	Thr	Leu	Ser	Met	Gly	Val	Leu	Gln	Cys	Asn	Leu	330
				320					325						
Leu	Ala	Asn	Val	Ser	Thr	Val	Ala	Asp	His	Phe	Asp	His	Ile	Arg	345
				335					340						

Ala Val Ile Gly Ser Glu Phe Ile Gly Ile Gly Gly Asn Tyr Asp
350 355 360

Gly Thr Gly Arg Phe Pro Gln Gly Leu Glu Asp Val Ser Thr Tyr
365 370 375

Pro Val Leu Ile Glu Glu Leu Leu Ser Arg Xaa Trp Ser Glu Glu
380 385 390

Glu Leu Gln Gly Val Leu Arg Gly Asn Leu Leu Arg Val Phe Arg
395 400 405

Gln Val Glu Lys Val Arg Glu Glu Ser Arg Ala Gln Ser Pro Val
410 415 420

Glu Ala Glu Phe Pro Tyr Gly Gln Leu Ser Thr Ser Cys His Ser
425 430 435

His Leu Val Pro Gln Asn Gly His Gln Ala Thr His Leu Glu Val
440 445 450

Thr Lys Gln Pro Thr Asn Arg Val Pro Trp Arg Ser Ser Asn Ala
455 460 465

Ser Pro Tyr Leu Val Pro Gly Leu Val Ala Ala Ala Thr Ile Pro
470 475 480

Thr Phe Thr Gln Trp Leu Cys
485

<210> 64
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 64
ccttcacctg cagtacacca tgggc 25

<210> 65
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 65
gtcacacaca gctctggcag ctgag 25

<210> 66
<211> 47
<212> DNA
<213> Artificial Sequence

[illegible]

<400> 66

<210> 67

<212> DNA

<213> Home

<213> Homo sapiens

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ggcccagcaa gcctgataag catgaagctc ttatctttgg tggctgtggt 150

cggggtgtttg ctggtgcccc cagctgaagc caacaagagt tctgaagata 200

tccggtgcaa atgcatctgt ccaccttata gaaacatcag tgggcacatt 250

tacaaccaga atgtatccca gaaggactgc aactgcctgc acgtggtgga 300

gcccattgcca gtgcctggcc atgacgtgga ggcctactgc ctgctgtgcg 350

agtgcaggta cgaggagcgc agcaccacca ccatcaaggt catcattgtc 400

atctacctgt ccgtgggtggg tgccctgttg ctctacatgg ccttcctgat 450

gctggtggac cctctgatcc gaaagccgga tgcatacact gagcaactgc 500

acaatgagga ggagaatgag gatgctcgct ctatggcagc agctgctgca 550

tccctcgggg gaccccgagc aaacacagtc ctggagcgtg tggaagggtgc 600

ccagcagcgg tggaagctgc aggtgcagga gcagcgggaag acagtcttcg 650

atcggcaciaa gatgctcagc tagatgggct ggtgtggttg ggtcaaggcc 700

ccaacaccat ggctgccagc ttccaggctg gacaaagcag ggggctactt 750

ctcccttccc tcggttcag tcttcccttt aaaagcctgt ggcatttttc 800

ctccttctcc ctaactttag aaatgttgta cttggctatt ttgattaggg 850

aagagggatg tggctctctga tctctgttgt cttcttgggt ctttgggggt 900

gaagggagggg ggaaggcagg ccagaagggg atggagacat tcgaggcggc 950

ctcaggagtg gatgcgatct gtctctcttg gctccactct tgccgccttc 1000

cagctctgag tcttgggaat gttgttacct ttggaagata aagctgggtc 1050

ttcaggaact cagtgtctgq gaggaagca tggccagca ttcagcatgt 1100

gttcctttct gcagtggttc ttatcaccac ctccctccca gcccgggcgc 1150

ctcagcccca gccccagctc cagccctgag gacagctctg atgggagagc 1200
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 cgctgtcccc tgtgcacttc tcgcactggg gcatggagtg cccatgcata 1300
 ctctgtgtgcc ggtccccctca cctgcacttg aggggtctgg gcagtcacctc 1350
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 gactcgaggc tgagcgtgga tctgaacacc acagcccctg tacttggtggt 1450
 gcctcttgct cctgaacttc gttgtaccag tgcattggaga gaaaattttg 1500
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 ttttatttct ctca 1564

<210> 68
 <211> 183
 <212> PRT
 <213> Homo sapiens

<400> 68
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 Cys Ile Cys Pro Pro Tyr Arg Asn Ile Ser Gly His Ile Tyr Asn
 35 40 45
 Gln Asn Val Ser Gln Lys Asp Cys Asn Cys Leu His Val Val Glu
 50 55 60
 Pro Met Pro Val Pro Gly His Asp Val Glu Ala Tyr Cys Leu Leu
 65 70 75
 Cys Glu Cys Arg Tyr Glu Glu Arg Ser Thr Thr Thr Ile Lys Val
 80 85 90
 Ile Ile Val Ile Tyr Leu Ser Val Val Gly Ala Leu Leu Leu Tyr
 95 100 105
 Met Ala Phe Leu Met Leu Val Asp Pro Leu Ile Arg Lys Pro Asp
 110 115 120
 Ala Tyr Thr Glu Gln Leu His Asn Glu Glu Glu Asn Glu Asp Ala
 125 130 135
 Arg Ser Met Ala Ala Ala Ala Ser Leu Gly Gly Pro Arg Ala
 140 145 150
 Asn Thr Val Leu Glu Arg Val Glu Gly Ala Gln Gln Arg Trp Lys
 155 160 165

Leu Gln Val Gln Glu Gln Arg Lys Thr Val Phe Asp Arg His Lys
170 175 180

Met Leu Ser

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tctgcaagcc cccgcgaccc aagtgagggg ccccggtgtg gggtcctccc 150
tccctttgca ttcccacccc tccgggcttt gcgtcttcct ggggaccccc 200
tcgccgggag atggccgcgt tgatgcggag caaggattcg tctgtctgcc 250
tgctcctact ggccgcggtg ctgatggtgg agagctcaca gatcggcagt 300
tcgcgggcca aactcaactc catcaagtcc tctctgggcg gggagacgcc 350
tggtcaggcc gccaatcgat ctgcgggcat gtaccaagga ctggcattcg 400
gcggcagtaa gaagggcaaa aacctggggc aggcctaccc ttgtagcagt 450
gataaggagt gtgaagttgg gaggtattgc cacagtcccc accaaggatc 500
atcggcctgc atggtgtgtc ggagaaaaaa gaagcgtctc caccgagatg 550
gcatgtgtcg cccagtagcc cgctgcaata atggcatctg tatcccagtt 600
actgaaagca tcttaacccc tcacatcccg gctctggatg gtactcggca 650
cagagatcga aaccacggtc attactcaaa ccatgacttg ggatggcaga 700
atctaggaag accacacact aagatgtcac atataaaagg gcatgaagga 750
gaccctgcc tacgatcatc agactgcatt gaagggtttt gctgtgctcg 800
tcatttcttg accaaaatct gcaaaccagt gctccatcag ggggaagtct 850
gtaccaaaca acgcaagaag ggttctcatg ggctggaaat tttccagcgt 900
tgcgactgtg cgaagggcct gtcttgcaaa gtatggaaag atgccaccta 950
ctcctccaaa gccagactcc atgtgtgtca gaaaatttga tcaccattga 1000
ggaacatcat caattgcaga ctgtgaagtt gtgtatttaa tgcattatag 1050
catggtggaa aataagggtc agatgcagaa gaatggctaa aataagaaac 1100
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gtgataagaa tatagatgat cacaaaaagg gagaaagaaa acatgaactg 1150
aatagattag aatgggtgac aaatgcagtg cagccagtggt ttccattatg 1200
caacttgtct atgtaaataa tgtacacatt tgtggaaaat gctattatta 1250
agagaacaag cacacagtg aaattactga tgagtagcat gtgactttcc 1300
aagagtttag gttgtgctgg aggagaggtt tccttcagat tgctgattgc 1350
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aaaatactcc tagaataact tggtatacaa taggttctaa aaataaaaatt 1450
gctaaacaag aaatgaaaac atggagcatt gtttaattac aacagaaaat 1500
taccttttga tttgtaacac tacttctgct gttcaatcaa gagtcttggt 1550
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cagttgttta ggaaggcctt taggaagaca aataaataac aaacaaacag 1650
ccacaaatac ttttttttca aaattttagt ttctacgtga attaataaga 1700
actgatacaa gacaaaaaca gttccttcag attctacgga atgacagtat 1750
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aaatataagt aggataactt gtaaaacctg catattgcta atctatagac 2500
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<210> 71
<211> 1809
<212> DNA
<213> Homo sapiens
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acatcacgtt tttaaaaatt gatttcttca aattcatggc aaatatattcc 150
cttcctttta acttcttatg tcagaatgag gaaggatagc tgcatttatt 200
tagtcagttt tcattgcata gtaatatattt catgtagtat tttctaagtt 250
atattttagt aattcatatg ttttagatta taggttttaa catacttgtg 300
aaaatacttg atgtgtttta aagccttggg cagaaattct gtattgttga 350
ggatttggtc ttttatcccc cttttaaaagt catccgtcct tggctcagga 400
tttgagagc ttgcaccacc aaaaatggca aacatcacca gctcccagat 450
tttgaccag ttgaaagctc cgagtttggg ccagtttacc accaccccaa 500
gtacacagca gaatagtaca agtcacccta caactactac ttcttgggac 550
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SECRET

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				20					25					30
Phe	Gly	Glu	Leu	Ala	Pro	Pro	Lys	Met	Ala	Asn	Ile	Thr	Ser	Ser
				35					40					45
Gln	Ile	Leu	Asp	Gln	Leu	Lys	Ala	Pro	Ser	Leu	Gly	Gln	Phe	Thr
				50					55					60
Thr	Thr	Pro	Ser	Thr	Gln	Gln	Asn	Ser	Thr	Ser	His	Pro	Thr	Thr
				65					70					75
Thr	Thr	Ser	Trp	Asp	Leu	Lys	Pro	Pro	Thr	Ser	Gln	Ser	Ser	Val
				80					85					90
Leu	Ser	His	Leu	Asp	Phe	Lys	Ser	Gln	Pro	Glu	Pro	Ser	Pro	Val
				95					100					105
Leu	Ser	Gln	Leu	Ser	Gln	Arg	Gln	Gln	His	Gln	Ser	Gln	Ala	Val
				110					115					120
Thr	Val	Pro	Pro	Pro	Gly	Leu	Glu	Ser	Phe	Pro	Ser	Gln	Ala	Lys
				125					130					135
Leu	Arg	Glu	Ser	Thr	Pro	Gly	Asp	Ser	Pro	Ser	Thr	Val	Asn	Lys
				140					145					150
Leu	Leu	Gln	Leu	Pro	Ser	Thr	Thr	Ile	Glu	Asn	Ile	Ser	Val	Ser
				155					160					165
Val	His	Gln	Pro	Gln	Pro	Lys	His	Ile	Lys	Leu	Ala	Lys	Arg	Arg
				170					175					180
Ile	Pro	Pro	Ala	Ser	Lys	Ile	Pro	Ala	Ser	Ala	Val	Glu	Met	Pro
				185					190					195
Gly	Ser	Ala	Asp	Val	Thr	Gly	Leu	Asn	Val	Gln	Phe	Gly	Ala	Leu
				200					205					210
Glu	Phe	Gly	Ser	Glu	Pro	Ser	Leu	Ser	Glu	Phe	Gly	Ser	Ala	Pro
				215					220					225
Ser	Ser	Glu	Asn	Ser	Asn	Gln	Ile	Pro	Ile	Ser	Leu	Tyr	Ser	Lys
				230					235					240
Ser	Leu	Ser	Glu	Pro	Leu	Asn	Thr	Ser	Leu	Ser	Met	Thr	Ser	Ala
				245					250					255
Val	Gln	Asn	Ser	Thr	Tyr	Thr	Thr	Ser	Val	Ile	Thr	Ser	Cys	Ser
				260					265					270
Leu	Thr	Ser	Ser	Ser	Leu	Asn	Ser	Ala	Ser	Pro	Val	Ala	Met	Ser

10-10-68

```
<210> 73
<211> 26
<212> DNA
<213> Artificial Sequence
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<220>
<223> Synthetic oligonucleotide probe

```
<400> 73
aatcatggc aaatatttcc cttccc 26
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```
<210> 74
<211> 22
<212> DNA
<213> Artificial Sequence
```

<220>
<223> Synthetic oligonucleotide probe

<400> 74
tggtaaactg gcccaaactc gg 22

```
<210> 75
<211> 50
<212> DNA
<213> Artificial Sequence
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<220>
<223> Synthetic oligonucleotide probe

```
<400> 75
  ttaaagtcat ccgtccttgg ctcaggattt ggagagcttg caccaccaa 50
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```
<210> 76
<211> 1989
<212> DNA
<213> Homo sapiens
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<400> 76

gcegagtggg acaaagcctg gggctgggcg ggggccatgg cgctgccatc 50
 ccgaatcctg ctttggaac ttgtgcttct gcagagctct gctgttctcc 100
 tgcactcagc ggtggaggag acggacgcgg ggctgtacac ctgcaacctg 150
 caccatcact actgccacct ctacgagagc ctggccgtcc gcctggaggt 200
 caccgacggc cccccggcca cccccgcta ctgggacggc gagaaggagg 250
 tgctggcggt ggcgcgcggc gcacccgcgc ttctgacctg cgtgaaccgc 300
 gggcacgtgt ggaccgaccg gcacgtggag gaggtcaac aggtggtgca 350
 ctgggacggc cagccgcccg gggccccga cgaccgcgcg gaccgcctgc 400
 tggacctcta cgcgtcgggc gagcgcgcgc cctacgggcc ctttttctg 450
 cgcgacgcgc tggctgtggg cgcggatgcc tttagcgcgc gtgacttctc 500
 actgcgtatc gagccgctgg aggtcgccga cgagggcacc tactcctgcc 550
 acctgcacca ccattactgt ggctgcacg aacgccgcgt cttccacctg 600
 acggtcgccg aacccccgcg ggagccgccc ccccggggct ctccgggcaa 650
 cggctccagc cacagcggcg cccagggccc agacccaca ctggcgcgcg 700
 gccacaacgt catcaatgtc atcgtccccg agagccgagc ccacttcttc 750
 cagcagctgg gctacgtgct ggccacgctg ctgctcttca tctgtctact 800
 ggtcactgtc ctctggccg cccgcaggcg ccgcggaggc tacgaatact 850
 cggaccagaa gtcgggaaag tcaaagggga aggatgttaa cttggcggag 900
 ttcgctgtgg ctgcagggga ccagatgctt tacaggagtg aggacatcca 950
 gctagattac aaaaacaaca tctgaagga gagggcggag ctggcccaca 1000
 gccccctgcc tgccaagtac atcgacctag acaaagggtt ccggaaggag 1050
 aactgcaa ataggaggccc tgggtcctg gctgggccag cagctgcacc 1100
 tctcctgtct gtgtcctcg gggcatctcc tgatgtccg gggctcacc 1150
 ccctccagc ggctgtccc gctttcctgg aatttgccct gggcgatgc 1200
 agaggccgcc tccacacccc tccccaggg gcttggtggc agcatagccc 1250
 ccacccctgc ggcctttgct cacgggtggc cctgcccacc cctggcaca 1300
 ccaaatccc actgatgcc atcatgcct cagacccttc tgggtctgc 1350
 ccgctggggg cctgaagaca ttctggagg acactcccat cagaacctgg 1400

(The following information was obtained from the records maintained by the FBI at its New York City Office.)

```
<210> 77
<211> 341
<212> PRT
<213> Homo sapiens
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<400>	77																		
Met	Ala	Leu	Pro	Ser	Arg	Ile	Leu	Leu	Trp	Lys	Leu	Val	Leu	Leu					
1				5					10					15					
Gln	Ser	Ser	Ala	Val	Leu	Leu	His	Ser	Ala	Val	Glu	Glu	Thr	Asp					
				20					25					30					
Ala	Gly	Leu	Tyr	Thr	Cys	Asn	Leu	His	His	His	Tyr	Cys	His	Leu					
				35					40					45					
Tyr	Glu	Ser	Leu	Ala	Val	Arg	Leu	Glu	Val	Thr	Asp	Gly	Pro	Pro					
				50					55					60					
Ala	Thr	Pro	Ala	Tyr	Trp	Asp	Gly	Glu	Lys	Glu	Val	Leu	Ala	Val					
				65					70					75					
Ala	Arg	Gly	Ala	Pro	Ala	Leu	Leu	Thr	Cys	Val	Asn	Arg	Gly	His					
				80					85					90					
Val	Trp	Thr	Asp	Arg	His	Val	Glu	Glu	Ala	Gln	Gln	Val	Val	His					
				95					100					105					
Trp	Asp	Arg	Gln	Pro	Pro	Gly	Val	Pro	His	Asp	Arg	Ala	Asp	Arg					
				110					115					120					
Leu	Leu	Asp	Leu	Tyr	Ala	Ser	Gly	Glu	Arg	Arg	Ala	Tyr	Gly	Pro					
				125					130					135					

Leu Phe Leu Arg Asp Arg Val Ala Val Gly Ala Asp Ala Phe Glu
 140 145 150
 Arg Gly Asp Phe Ser Leu Arg Ile Glu Pro Leu Glu Val Ala Asp
 155 160 165
 Glu Gly Thr Tyr Ser Cys His Leu His His His Tyr Cys Gly Leu
 170 175 180
 His Glu Arg Arg Val Phe His Leu Thr Val Ala Glu Pro His Ala
 185 190 195
 Glu Pro Pro Pro Arg Gly Ser Pro Gly Asn Gly Ser Ser His Ser
 200 205 210
 Gly Ala Pro Gly Pro Asp Pro Thr Leu Ala Arg Gly His Asn Val
 215 220 225
 Ile Asn Val Ile Val Pro Glu Ser Arg Ala His Phe Phe Gln Gln
 230 235 240
 Leu Gly Tyr Val Leu Ala Thr Leu Leu Leu Phe Ile Leu Leu Leu
 245 250 255
 Val Thr Val Leu Leu Ala Ala Arg Arg Arg Arg Gly Gly Tyr Glu
 260 265 270
 Tyr Ser Asp Gln Lys Ser Gly Lys Ser Lys Gly Lys Asp Val Asn
 275 280 285
 Leu Ala Glu Phe Ala Val Ala Ala Gly Asp Gln Met Leu Tyr Arg
 290 295 300
 Ser Glu Asp Ile Gln Leu Asp Tyr Lys Asn Asn Ile Leu Lys Glu
 305 310 315
 Arg Ala Glu Leu Ala His Ser Pro Leu Pro Ala Lys Tyr Ile Asp
 320 325 330
 Leu Asp Lys Gly Phe Arg Lys Glu Asn Cys Lys
 335 340

<210> 78

<211> 2243

<212> DNA

<213> Homo sapiens

<400> 78

cgccggaggc agcggcgggc tggcgagcg ggcacatggc cggtgtctca 50

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cagtctccga gctgaccagg aggcactgct tgagaagctg ctggaccgcc 150

cgccccctgg cctgcagagg cccgaggacc gcttctgtgg cacatacatc 200

atctttcttca gcctgggcat tggcagtcta ctgccatgga acttctttat 250
 cactgccaag gactactgga tgttcaaact ccgcaactcc tccagcccag 300
 ccaccgggga ggaccctgag ggctcagaca tcctgaacta ctttgagagc 350
 taccttgccg ttgcctccac cgtgccctcc atgctgtgcc tggaggccaa 400
 ctccctgctt gtcaacaggg ttgcagtcca catccgtgtc ctggcctcac 450
 tgacgggcat cctggccatc ttcattggtga taactgcact ggtgaagggtg 500
 gacacttcc cctggaccgg tggttttttt gcggtcacca ttgtctgcat 550
 ggtgatccct agcgggtgct ccaactgtctt cagcagcagc atctacggca 600
 tgaccggctc ctttccatg aggaactccc aagcactgat atcaggagga 650
 gccatgggag ggacgggtcag cgccgtggcc tcattggtgg acttggtgtc 700
 atccagtgat gtgaggaaca gcgccttggc cttcttccctg acggccacca 750
 tcttccctgt gctctgcatg ggactctacc tgctgctgtc caggctggag 800
 tatgccagggt actacatgag gcctgttctt gcggcccatg tgtttctctg 850
 tgaagaggag cttccccagg actccctcag tgcccttctg gtggcctcca 900
 gattcattga ttccacaca cccctctcc gccccatcct gaagaagacg 950
 gccagcctgg gcttctgtgt cacctaagtc ttcttcatca ccagcctcat 1000
 ctaccccgcc gtctgcacca acatcgagtc cctcaacaag ggctcgggct 1050
 cactgtggac caccaagttt ttcattcccc tcaactacct cctcctgtac 1100
 aactttgtgt acctatgtgg ccggcagctc accgcttggg tccagggtgc 1150
 agggcccaac agcaaggcgc tcccagggtt cgtgctcctc cggacctgcc 1200
 tcatccccct ctctgtgtc tgtaactacc agccccgct ccacctgaag 1250
 actgtggtct tccagtccga tgtgtacccc gcactcctca gctccctgct 1300
 ggggtcagc aacggctacc tcagcacctt ggccctcctc tacgggccta 1350
 agattgtgcc caggagctg gctgaggcca cgggagtggg gatgtccttt 1400
 tatgtgtgct tgggcttaac actgggctca gcctgtctta cctcctggt 1450
 gcacctcatc tagaaggag gacacaagga cattggtgct tcagagcctt 1500
 tgaagatgag aagagagtgc aggagggtg ggggccatgg aggaaaggcc 1550
 taaagtctca cttggggaca gagagcagag cacactcggg cctcatccct 1600
 cccaagatgc cagttagcca cgtccatgcc cattccgtgc aaggcagata 1650

(The following information was obtained from the above sources.)

<210> 79

<211> 475

<212> PRT

<213> Homo sapiens

<400> 79

Met	Ala	Val	Val	Ser	Glu	Asp	Asp	Phe	Gln	His	Ser	Ser	Asn	Ser
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Thr	Tyr	Gly	Thr	Thr	Ser	Ser	Ser	Leu	Arg	Ala	Asp	Gln	Glu	Ala
				20					25					30
Leu	Leu	Glu	Lys	Leu	Leu	Asp	Arg	Pro	Pro	Pro	Gly	Leu	Gln	Arg
				35					40					45
Pro	Glu	Asp	Arg	Phe	Cys	Gly	Thr	Tyr	Ile	Ile	Phe	Phe	Ser	Leu
				50					55					60
Gly	Ile	Gly	Ser	Leu	Leu	Pro	Trp	Asn	Phe	Phe	Ile	Thr	Ala	Lys
				65					70					75
Glu	Tyr	Trp	Met	Phe	Lys	Leu	Arg	Asn	Ser	Ser	Ser	Pro	Ala	Thr
				80					85					90
Gly	Glu	Asp	Pro	Glu	Gly	Ser	Asp	Ile	Leu	Asn	Tyr	Phe	Glu	Ser
				95					100					105
Tyr	Leu	Ala	Val	Ala	Ser	Thr	Val	Pro	Ser	Met	Leu	Cys	Leu	Val
				110					115					120
Ala	Asn	Phe	Leu	Leu	Val	Asn	Arg	Val	Ala	Val	His	Ile	Arg	Val
				125					130					135

Leu	Ala	Ser	Leu	Thr 140	Val	Ile	Leu	Ala	Ile 145	Phe	Met	Val	Ile	Thr 150
Ala	Leu	Val	Lys	Val 155	Asp	Thr	Ser	Ser	Trp 160	Thr	Arg	Gly	Phe	Phe 165
Ala	Val	Thr	Ile	Val 170	Cys	Met	Val	Ile	Leu 175	Ser	Gly	Ala	Ser	Thr 180
Val	Phe	Ser	Ser	Ser 185	Ile	Tyr	Gly	Met	Thr 190	Gly	Ser	Phe	Pro	Met 195
Arg	Asn	Ser	Gln	Ala 200	Leu	Ile	Ser	Gly	Gly 205	Ala	Met	Gly	Gly	Thr 210
Val	Ser	Ala	Val	Ala 215	Ser	Leu	Val	Asp	Leu 220	Ala	Ala	Ser	Ser	Asp 225
Val	Arg	Asn	Ser	Ala 230	Leu	Ala	Phe	Phe	Leu 235	Thr	Ala	Thr	Ile	Phe 240
Leu	Val	Leu	Cys	Met 245	Gly	Leu	Tyr	Leu	Leu 250	Leu	Ser	Arg	Leu	Glu 255
Tyr	Ala	Arg	Tyr	Tyr 260	Met	Arg	Pro	Val	Leu 265	Ala	Ala	His	Val	Phe 270
Ser	Gly	Glu	Glu	Glu 275	Leu	Pro	Gln	Asp	Ser 280	Leu	Ser	Ala	Pro	Ser 285
Val	Ala	Ser	Arg	Phe 290	Ile	Asp	Ser	His	Thr 295	Pro	Pro	Leu	Arg	Pro 300
Ile	Leu	Lys	Lys	Thr 305	Ala	Ser	Leu	Gly	Phe 310	Cys	Val	Thr	Tyr	Val 315
Phe	Phe	Ile	Thr	Ser 320	Leu	Ile	Tyr	Pro	Ala 325	Val	Cys	Thr	Asn	Ile 330
Glu	Ser	Leu	Asn	Lys 335	Gly	Ser	Gly	Ser	Leu 340	Trp	Thr	Thr	Lys	Phe 345
Phe	Ile	Pro	Leu	Thr 350	Thr	Phe	Leu	Leu	Tyr 355	Asn	Phe	Ala	Asp	Leu 360
Cys	Gly	Arg	Gln	Leu 365	Thr	Ala	Trp	Ile	Gln 370	Val	Pro	Gly	Pro	Asn 375
Ser	Lys	Ala	Leu	Pro 380	Gly	Phe	Val	Leu	Leu 385	Arg	Thr	Cys	Leu	Ile 390
Pro	Leu	Phe	Val	Leu 395	Cys	Asn	Tyr	Gln	Pro 400	Arg	Val	His	Leu	Lys 405
Thr	Val	Val	Phe	Gln 410	Ser	Asp	Val	Tyr	Pro 415	Ala	Leu	Leu	Ser	Ser 420

Leu Leu Gly Leu Ser Asn Gly Tyr Leu Ser Thr Leu Ala Leu Leu
425 430 435

Tyr Gly Pro Lys Ile Val Pro Arg Glu Leu Ala Glu Ala Thr Gly
440 445 450

Val Val Met Ser Phe Tyr Val Cys Leu Gly Leu Thr Leu Gly Ser
455 460 465

Ala Cys Ser Thr Leu Leu Val His Leu Ile
470 475

<210> 80
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 80
ttttgcggtc accattgtct gc 22

<210> 81
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 81
cgtaggtgac acagaagccc agg 23

<210> 82
<211> 49
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 82
tacggcatga ccggctcctt tcctatgagg aactcccagg cactgatat 49

<210> 83
<211> 1844
<212> DNA
<213> Homo sapiens

<400> 83
gacagtggag ggcagtggag aggaccgcgc tgtcctgctg tcaccaagag 50
ctggagacac catctccac cgagagtcac ggccccattg gccctgcacc 100
tcctogtct cgtcccatc ctctcagcc tgggtggcctc ccaggactgg 150

aaggctgaac	gcagccaaga	ccccttcgag	aaatgcatgc	aggatcctga	200
ctatgagcag	ctgctcaagg	tggtagacctg	ggggctcaat	cggaccctga	250
agccccagag	ggtgattgtg	gttggcgctg	gtgtggccgg	gctggtggcc	300
gccaaagtgc	tcagcgatgc	tggacacaag	gtcaccatcc	tggaggcaga	350
taacaggatc	ggggggccgca	tcttcaccta	ccgggaccag	aacacgggct	400
ggattgggga	gctgggagcc	atgcgcatgc	ccagctctca	caggatcctc	450
cacaagctct	gccagggcct	ggggctcaac	ctgaccaagt	tcaccacagta	500
cgacaagaac	acgtggacgg	aggtgcacga	agtgaagctg	cgcaactatg	550
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caaagacctc	aaggcactgg	gctgcagaaa	ggcgatgaag	aagtttgaaa	700
ggcacacgct	cttggaatat	cttctcgggg	aggggaacct	gagccggccg	750
gccgtgcagc	ttctgggaga	cgtgatgtcc	gaggatggct	tcttctatct	800
cagcttcgcc	gaggccctcc	gggccacag	ctgcctcagc	gacagactcc	850
agtacagccg	catcgtgggt	ggctgggacc	tgctgccgcg	cgcgctgctg	900
agctcgctgt	ccgggcttgt	gctgttgaac	gcgcccgtgg	tggcgatgac	950
ccagggaccg	cacgatgtgc	acgtgcagat	cgagacctct	ccccggcgcg	1000
ggaatctgaa	ggtgctgaag	gccgacgtgg	tgctgctgac	ggcgagcgga	1050
ccggcggtga	agcgcatac	cttctcgccg	ccgctgcccc	gccacatgca	1100
ggaggcgctg	cggaggctgc	actacgtgcc	ggccaccaag	gtgttcctaa	1150
gcttcgcgag	gcccttctgg	cgcgaggagc	acattgaagg	cggccactca	1200
aacaccgata	gcccgtcgcg	catgattttc	taccgcgcgc	cgcgcgaggg	1250
cgcgctgctg	ctggcctcgt	acacgtggtc	ggacgcggcg	gcagcgttcg	1300
ccggcttgag	ccgggaagag	gcgttgcgct	tggcgctcga	cgacgtggcg	1350
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caagcgttgg	gcggaggacc	agcacagcca	gggtggcttt	gtggtacagc	1450
cgccggcgct	ctggcaaacc	gaaaaggatg	actggacggg	cccttatggc	1500
cgcactact	ttgccggcga	gcacaccgcc	taccgcgacg	gctgggtgga	1550

gacggcggtc aagtcggcgc tgcgcgccgc catcaagatc aacagccgga 1600
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 gaggggcagg ggcattgtgca tgggggtggcc agcagcccct cgcattgacct 1700
 ggcaaaggaa gaaggcagcc accctccagt ccaaggccag ttatctctcc 1750
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 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 1844

<210> 84
 <211> 567
 <212> PRT
 <213> Homo sapiens

<400> 84
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 20 25 30
 Asp Pro Phe Glu Lys Cys Met Gln Asp Pro Asp Tyr Glu Gln Leu
 35 40 45
 Leu Lys Val Val Thr Trp Gly Leu Asn Arg Thr Leu Lys Pro Gln
 50 55 60
 Arg Val Ile Val Val Gly Ala Gly Val Ala Gly Leu Val Ala Ala
 65 70 75
 Lys Val Leu Ser Asp Ala Gly His Lys Val Thr Ile Leu Glu Ala
 80 85 90
 Asp Asn Arg Ile Gly Gly Arg Ile Phe Thr Tyr Arg Asp Gln Asn
 95 100 105
 Thr Gly Trp Ile Gly Glu Leu Gly Ala Met Arg Met Pro Ser Ser
 110 115 120
 His Arg Ile Leu His Lys Leu Cys Gln Gly Leu Gly Leu Asn Leu
 125 130 135
 Thr Lys Phe Thr Gln Tyr Asp Lys Asn Thr Trp Thr Glu Val His
 140 145 150
 Glu Val Lys Leu Arg Asn Tyr Val Val Glu Lys Val Pro Glu Lys
 155 160 165
 Leu Gly Tyr Ala Leu Arg Pro Gln Glu Lys Gly His Ser Pro Glu
 170 175 180
 Asp Ile Tyr Gln Met Ala Leu Asn Gln Ala Leu Lys Asp Leu Lys
 185 190 195

Ala	Leu	Gly	Cys	Arg	Lys	Ala	Met	Lys	Lys	Phe	Glu	Arg	His	Thr
				200						205				210
Leu	Leu	Glu	Tyr	Leu	Leu	Gly	Glu	Gly	Asn	Leu	Ser	Arg	Pro	Ala
				215					220					225
Val	Gln	Leu	Leu	Gly	Asp	Val	Met	Ser	Glu	Asp	Gly	Phe	Phe	Tyr
				230					235					240
Leu	Ser	Phe	Ala	Glu	Ala	Leu	Arg	Ala	His	Ser	Cys	Leu	Ser	Asp
				245					250					255
Arg	Leu	Gln	Tyr	Ser	Arg	Ile	Val	Gly	Gly	Trp	Asp	Leu	Leu	Pro
				260					265					270
Arg	Ala	Leu	Leu	Ser	Ser	Leu	Ser	Gly	Leu	Val	Leu	Leu	Asn	Ala
				275					280					285
Pro	Val	Val	Ala	Met	Thr	Gln	Gly	Pro	His	Asp	Val	His	Val	Gln
				290					295					300
Ile	Glu	Thr	Ser	Pro	Pro	Ala	Arg	Asn	Leu	Lys	Val	Leu	Lys	Ala
				305					310					315
Asp	Val	Val	Leu	Leu	Thr	Ala	Ser	Gly	Pro	Ala	Val	Lys	Arg	Ile
				320					325					330
Thr	Phe	Ser	Pro	Pro	Leu	Pro	Arg	His	Met	Gln	Glu	Ala	Leu	Arg
				335					340					345
Arg	Leu	His	Tyr	Val	Pro	Ala	Thr	Lys	Val	Phe	Leu	Ser	Phe	Arg
				350					355					360
Arg	Pro	Phe	Trp	Arg	Glu	Glu	His	Ile	Glu	Gly	Gly	His	Ser	Asn
				365					370					375
Thr	Asp	Arg	Pro	Ser	Arg	Met	Ile	Phe	Tyr	Pro	Pro	Pro	Arg	Glu
				380					385					390
Gly	Ala	Leu	Leu	Leu	Ala	Ser	Tyr	Thr	Trp	Ser	Asp	Ala	Ala	Ala
				395					400					405
Ala	Phe	Ala	Gly	Leu	Ser	Arg	Glu	Glu	Ala	Leu	Arg	Leu	Ala	Leu
				410					415					420
Asp	Asp	Val	Ala	Ala	Leu	His	Gly	Pro	Val	Val	Arg	Gln	Leu	Trp
				425					430					435
Asp	Gly	Thr	Gly	Val	Val	Lys	Arg	Trp	Ala	Glu	Asp	Gln	His	Ser
				440					445					450
Gln	Gly	Gly	Phe	Val	Val	Gln	Pro	Pro	Ala	Leu	Trp	Gln	Thr	Glu
				455					460					465
Lys	Asp	Asp	Trp	Thr	Val	Pro	Tyr	Gly	Arg	Ile	Tyr	Phe	Ala	Gly
				470					475					480

SECRET

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<210> 85
<211> 3316
<212> DNA
<213> Homo sapiens
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<400> 85
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tggaggaacc acgagcgagg gaagaaggac agggactcgt gtggcaggaa 150
gaactcagag ccgggaagcc cccattcact agaagcactg agagatgcgg 200
ccccctcgca ggggtctgaat ttctctgctgc tgttcacaaa gatgcttttt 250
atctttaact ttttgttttc cccacttccg accccggcgt tgatctgcat 300
cctgacattt ggagctgcc a tcttcttgctg gctgatcacc agacctcaac 350
ccgtcttacc tcttcttgac ctgaacaatc agtctgtggg aattgagggg 400
ggagcacgga aggggggttc ccagaagaac aatgacctaa caagttgctg 450
cttctcagat gccaaagacta tgtatgaggt tttccaaaga ggactcgctg 500
tgtctgacaa tgggccttgc ttgggatata gaaaaccaa ccagccctac 550
agatggctat cttacaaaca ggtgtctgat agagcagagt acctgggttc 600
ctgtctcttg cataaaggtt ataatcctc accagaccag tttgtcggca 650
tctttgctca gaataggcca gactggatca tctccgaatt ggcttggttac 700
acgtactcta tggtagctgt acctctgtat gacaccttg gaccagaagc 750
catcgtacat attgtcaaca aggctgatat cgccatgggtg atctgtgaca 800
caccacaaaa ggcattgggtg ctgataggga atgtagagaa aggttcacc 850

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ccgagcctga	aggtgatcat	ccttatggac	ccctttgatg	atgacctgaa	900
gcaaagaggg	gagaagagtg	gaattgagat	cttatcccta	tatgatgctg	950
agaacctagg	caaagagcac	ttcagaaaac	ctgtgcctcc	tagcccagaa	1000
gacctgagcg	tcctctgctt	caccagtggg	accacaggtg	accccaaagg	1050
agccatgata	acccatcaaa	atattgtttc	aaatgctgct	gcctttctca	1100
aatgtgtgga	gcatgcttat	gagcccactc	ctgatgatgt	ggccatatcc	1150
tacctccctc	tggctcatat	gtttgagagg	attgtacagg	ctgtttgtga	1200
cagctgtgga	gccagagttg	gattcttcca	aggggatatt	cggttgctgg	1250
ctgacgacat	gaagactttg	aagcccacat	tgtttcccg	ggtgcctcga	1300
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1. The first part of the document is a list of references. The references are listed in two columns. The first column contains references 1 through 10, and the second column contains references 11 through 20. The references are as follows:

1. J. H. Van Wazer, <i>Chemical Reactions of Nitrogen Compounds</i> , Interscience, New York, 1953, p. 100.	11. J. H. Van Wazer, <i>Chemical Reactions of Nitrogen Compounds</i> , Interscience, New York, 1953, p. 100.
2. J. H. Van Wazer, <i>Chemical Reactions of Nitrogen Compounds</i> , Interscience, New York, 1953, p. 100.	12. J. H. Van Wazer, <i>Chemical Reactions of Nitrogen Compounds</i> , Interscience, New York, 1953, p. 100.
3. J. H. Van Wazer, <i>Chemical Reactions of Nitrogen Compounds</i> , Interscience, New York, 1953, p. 100.	13. J. H. Van Wazer, <i>Chemical Reactions of Nitrogen Compounds</i> , Interscience, New York, 1953, p. 100.
4. J. H. Van Wazer, <i>Chemical Reactions of Nitrogen Compounds</i> , Interscience, New York, 1953, p. 100.	14. J. H. Van Wazer, <i>Chemical Reactions of Nitrogen Compounds</i> , Interscience, New York, 1953, p. 100.
5. J. H. Van Wazer, <i>Chemical Reactions of Nitrogen Compounds</i> , Interscience, New York, 1953, p. 100.	15. J. H. Van Wazer, <i>Chemical Reactions of Nitrogen Compounds</i> , Interscience, New York, 1953, p. 100.
6. J. H. Van Wazer, <i>Chemical Reactions of Nitrogen Compounds</i> , Interscience, New York, 1953, p. 100.	16. J. H. Van Wazer, <i>Chemical Reactions of Nitrogen Compounds</i> , Interscience, New York, 1953, p. 100.
7. J. H. Van Wazer, <i>Chemical Reactions of Nitrogen Compounds</i> , Interscience, New York, 1953, p. 100.	17. J. H. Van Wazer, <i>Chemical Reactions of Nitrogen Compounds</i> , Interscience, New York, 1953, p. 100.
8. J. H. Van Wazer, <i>Chemical Reactions of Nitrogen Compounds</i> , Interscience, New York, 1953, p. 100.	18. J. H. Van Wazer, <i>Chemical Reactions of Nitrogen Compounds</i> , Interscience, New York, 1953, p. 100.
9. J. H. Van Wazer, <i>Chemical Reactions of Nitrogen Compounds</i> , Interscience, New York, 1953, p. 100.	19. J. H. Van Wazer, <i>Chemical Reactions of Nitrogen Compounds</i> , Interscience, New York, 1953, p. 100.
10. J. H. Van Wazer, <i>Chemical Reactions of Nitrogen Compounds</i> , Interscience, New York, 1953, p. 100.	20. J. H. Van Wazer, <i>Chemical Reactions of Nitrogen Compounds</i> , Interscience, New York, 1953, p. 100.

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Gln Leu Glu Ser Val Asn Lys Leu Tyr Gln Asp Glu Lys Ala Val
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Lys Phe Ser Tyr Asp Leu Ser Gln Cys Ile Asn Gln Met Lys Glu
155 160 165

Val Lys Glu Gln Cys Glu Glu Arg Ile Glu Glu Val Thr Lys Lys
170 175 180

Gly Asn Glu Ala Val Ala Ser Arg Asp Leu Ser Glu Asn Asn Asp
185 190 195

Gln Arg Gln Gln Leu Gln Ala Leu Ser Glu Pro Gln Pro Arg Leu
200 205 210

Gln Ala Ala Gly Leu Pro His Thr Glu Val Pro Gln Gly Lys Gly
215 220 225

Asn Val Leu Gly Asn Ser Lys Ser Gln Thr Pro Ala Pro Ser Ser

230	235	240
Glu Val Val Leu Asp Ser Lys Arg Gln	Val Glu Lys Glu Glu Thr	
245	250	255
Asn Glu Ile Gln Val Val Asn Glu Glu	Pro Gln Arg Asp Arg Leu	
260	265	270
Pro Gln Glu Pro Gly Arg Glu Gln Val	Val Glu Asp Arg Pro Val	
275	280	285
Gly Gly Arg Gly Phe Gly Gly Ala Gly	Glu Leu Gly Gln Thr Pro	
290	295	300
Gln Val Gln Ala Ala Leu Ser Val Ser	Gln Glu Asn Pro Glu Met	
305	310	315
Glu Gly Pro Glu Arg Asp Gln Leu Val	Ile Pro Asp Gly Gln Glu	
320	325	330
Glu Glu Gln Glu Ala Ala Gly Glu Gly	Arg Asn Gln Gln Lys Leu	
335	340	345
Arg Gly Glu Asp Asp Tyr Asn Met Asp	Glu Asn Glu Ala Glu Ser	
350	355	360
Glu Thr Asp Lys Gln Ala Ala Leu Ala	Gly Asn Asp Arg Asn Ile	
365	370	375
Asp Val Phe Asn Val Glu Asp Gln Lys	Arg Asp Thr Ile Asn Leu	
380	385	390
Leu Asp Gln Arg Glu Lys Arg Asn His	Thr Leu	
395	400	

<210> 101
 <211> 3671
 <212> DNA
 <213> Homo sapiens

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 tgccatgggg gagccaaggg aaacctgggg cctgctggat ggcttcccgga 200
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gctttggtga tgagagtgga tgggtgtgtg agctcctggt tcaggcagct 3250

Gln Leu Thr Ser Ala Gly Arg Arg Val Val Phe Met Gly Asp Asp
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 Thr Trp Lys Asp Leu Phe Pro Gly Ala Phe Ser Lys Ala Phe Phe
 185 190 195
 Phe Pro Ser Phe Asn Val Arg Asp Leu Asp Thr Val Asp Asn Gly
 200 205 210
 Ile Leu Glu His Leu Tyr Pro Thr Met Asp Ser Gly Glu Trp Asp
 215 220 225
 Val Leu Ile Ala His Phe Leu Gly Val Asp His Cys Gly His Lys
 230 235 240
 His Gly Pro His His Pro Glu Met Ala Lys Lys Leu Ser Gln Met
 245 250 255
 Asp Gln Val Ile Gln Gly Leu Val Glu Arg Leu Glu Asn Asp Thr
 260 265 270
 Leu Leu Val Val Ala Gly Asp His Gly Met Thr Thr Asn Gly Asp
 275 280 285
 His Gly Gly Asp Ser Glu Leu Glu Val Ser Ala Ala Leu Phe Leu
 290 295 300
 Tyr Ser Pro Thr Ala Val Phe Pro Ser Thr Pro Pro Glu Glu Pro
 305 310 315
 Glu Val Ile Pro Gln Val Ser Leu Val Pro Thr Leu Ala Leu Leu
 320 325 330
 Leu Gly Leu Pro Ile Pro Phe Gly Asn Ile Gly Glu Val Met Ala
 335 340 345
 Glu Leu Phe Ser Gly Gly Glu Asp Ser Gln Pro His Ser Ser Ala
 350 355 360
 Leu Ala Gln Ala Ser Ala Leu His Leu Asn Ala Gln Gln Val Ser
 365 370 375
 Arg Phe Leu His Thr Tyr Ser Ala Ala Thr Gln Asp Leu Gln Ala
 380 385 390
 Lys Glu Leu His Gln Leu Gln Asn Leu Phe Ser Lys Ala Ser Ala
 395 400 405
 Asp Tyr Gln Trp Leu Leu Gln Ser Pro Lys Gly Ala Glu Ala Thr
 410 415 420
 Leu Pro Thr Val Ile Ala Glu Leu Gln Gln Phe Leu Arg Gly Ala
 425 430 435
 Arg Ala Met Cys Ile Glu Ser Trp Ala Arg Phe Ser Leu Val Arg
 440 445 450

Met	Ala	Gly	Gly	Thr 455	Ala	Leu	Leu	Ala		Ala	Ser	Cys	Phe	Ile	Cys 465
Leu	Leu	Ala	Ser	Gln 470	Trp	Ala	Ile	Ser		Pro	Gly	Phe	Pro	Phe	Cys 480
Pro	Leu	Leu	Leu	Thr 485	Pro	Val	Ala	Trp		Gly	Leu	Val	Gly	Ala	Ile 495
Ala	Tyr	Ala	Gly	Leu 500	Leu	Gly	Thr	Ile		Glu	Leu	Lys	Leu	Asp	Leu 510
Val	Leu	Leu	Gly	Ala 515	Val	Ala	Ala	Val		Ser	Ser	Phe	Leu	Pro	Phe 525
Leu	Trp	Lys	Ala	Trp 530	Ala	Gly	Trp	Gly		Ser	Lys	Arg	Pro	Leu	Ala 540
Thr	Leu	Phe	Pro	Ile 545	Pro	Gly	Pro	Val		Leu	Leu	Leu	Leu	Leu	Phe 555
Arg	Leu	Ala	Val	Phe 560	Phe	Ser	Asp	Ser		Phe	Val	Val	Ala	Glu	Ala 570
Arg	Ala	Thr	Pro	Phe 575	Leu	Leu	Gly	Ser		Phe	Ile	Leu	Leu	Leu	Val 585
Val	Gln	Leu	His	Trp 590	Glu	Gly	Gln	Leu		Leu	Pro	Pro	Lys	Leu	Leu 600
Thr	Met	Pro	Arg	Leu 605	Gly	Thr	Ser	Ala		Thr	Thr	Asn	Pro	Pro	Arg 615
His	Asn	Gly	Ala	Tyr 620	Ala	Leu	Arg	Leu		Gly	Ile	Gly	Leu	Leu	Leu 630
Cys	Thr	Arg	Leu	Ala 635	Gly	Leu	Phe	His		Arg	Cys	Pro	Glu	Glu	Thr 645
Pro	Val	Cys	His	Ser 650	Ser	Pro	Trp	Leu		Ser	Pro	Leu	Ala	Ser	Met 660
Val	Gly	Gly	Arg	Ala 665	Lys	Asn	Leu	Trp		Tyr	Gly	Ala	Cys	Val	Ala 675
Ala	Leu	Val	Ala	Leu 680	Leu	Ala	Ala	Val		Arg	Leu	Trp	Leu	Arg	Arg 690
Tyr	Gly	Asn	Leu	Lys 695	Ser	Pro	Glu	Pro		Pro	Met	Leu	Phe	Val	Arg 705
Trp	Gly	Leu	Pro	Leu 710	Met	Ala	Leu	Gly		Thr	Ala	Ala	Tyr	Trp	Ala 720
Leu	Ala	Ser	Gly	Ala 725	Asp	Glu	Ala	Pro		Pro	Arg	Leu	Arg	Val	Leu 735

Val Ser Gly Ala Ser Met Val Leu Pro Arg Ala Val Ala Gly Leu	740	745	750
Ala Ala Ser Gly Leu Ala Leu Leu Leu Trp Lys Pro Val Thr Val	755	760	765
Leu Val Lys Ala Gly Ala Gly Ala Pro Arg Thr Arg Thr Val Leu	770	775	780
Thr Pro Phe Ser Gly Pro Pro Thr Ser Gln Ala Asp Leu Asp Tyr	785	790	795
Val Val Pro Gln Ile Tyr Arg His Met Gln Glu Glu Phe Arg Gly	800	805	810
Arg Leu Glu Arg Thr Lys Ser Gln Gly Pro Leu Thr Val Ala Ala	815	820	825
Tyr Gln Leu Gly Ser Val Tyr Ser Ala Ala Met Val Thr Ala Leu	830	835	840
Thr Leu Leu Ala Phe Pro Leu Leu Leu Leu His Ala Glu Arg Ile	845	850	855
Ser Leu Val Phe Leu Leu Leu Phe Leu Gln Ser Phe Leu Leu Leu	860	865	870
His Leu Leu Ala Ala Gly Ile Pro Val Thr Thr Pro Gly Pro Phe	875	880	885
Thr Val Pro Trp Gln Ala Val Ser Ala Trp Ala Leu Met Ala Thr	890	895	900
Gln Thr Phe Tyr Ser Thr Gly His Gln Pro Val Phe Pro Ala Ile	905	910	915
His Trp His Ala Ala Phe Val Gly Phe Pro Glu Gly His Gly Ser	920	925	930
Cys Thr Trp Leu Pro Ala Leu Leu Val Gly Ala Asn Thr Phe Ala	935	940	945
Ser His Leu Leu Phe Ala Val Gly Cys Pro Leu Leu Leu Leu Trp	950	955	960
Pro Phe Leu Cys Glu Ser Gln Gly Leu Arg Lys Arg Gln Gln Pro	965	970	975
Pro Gly Asn Glu Ala Asp Ala Arg Val Arg Pro Glu Glu Glu Glu	980	985	990
Glu Pro Leu Met Glu Met Arg Leu Arg Asp Ala Pro Gln His Phe	995	1000	1005
Tyr Ala Ala Leu Leu Gln Leu Gly Leu Lys Tyr Leu Phe Ile Leu	1010	1015	1020

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<210> 104
<211> 442
<212> PRT
<213> Homo sapiens

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Leu Leu Thr Leu Cys Ser Ile Ser Ser Gln Ile Gly Pro Pro Glu
20 25 30
Val Ala Leu Thr Thr Asp Glu Lys Ser Ile Ser Val Val Leu Thr
35 40 45
Ala Pro Glu Lys Trp Lys Arg Asn Pro Glu Asp Leu Pro Val Ser
50 55 60
Met Gln Gln Ile Tyr Ser Asn Leu Lys Tyr Asn Val Ser Val Leu
65 70 75
Asn Thr Lys Ser Asn Arg Thr Trp Ser Gln Cys Val Thr Asn His
80 85 90

Thr	Leu	Val	Leu	Thr	Trp	Leu	Glu	Pro	Asn	Thr	Leu	Tyr	Cys	Val	
				95					100					105	
His	Val	Glu	Ser	Phe	Val	Pro	Gly	Pro	Pro	Arg	Arg	Ala	Gln	Pro	
				110					115					120	
Ser	Glu	Lys	Gln	Cys	Ala	Arg	Thr	Leu	Lys	Asp	Gln	Ser	Ser	Glu	
				125					130					135	
Phe	Lys	Ala	Lys	Ile	Ile	Phe	Trp	Tyr	Val	Leu	Pro	Ile	Ser	Ile	
				140					145					150	
Thr	Val	Phe	Leu	Phe	Ser	Val	Met	Gly	Tyr	Ser	Ile	Tyr	Arg	Tyr	
				155					160					165	
Ile	His	Val	Gly	Lys	Glu	Lys	His	Pro	Ala	Asn	Leu	Ile	Leu	Ile	
				170					175					180	
Tyr	Gly	Asn	Glu	Phe	Asp	Lys	Arg	Phe	Phe	Val	Pro	Ala	Glu	Lys	
				185					190					195	
Ile	Val	Ile	Asn	Phe	Ile	Thr	Leu	Asn	Ile	Ser	Asp	Asp	Ser	Lys	
				200					205					210	
Ile	Ser	His	Gln	Asp	Met	Ser	Leu	Leu	Gly	Lys	Ser	Ser	Asp	Val	
				215					220					225	
Ser	Ser	Leu	Asn	Asp	Pro	Gln	Pro	Ser	Gly	Asn	Leu	Arg	Pro	Pro	
				230					235					240	
Gln	Glu	Glu	Glu	Glu	Val	Lys	His	Leu	Gly	Tyr	Ala	Ser	His	Leu	
				245					250					255	
Met	Glu	Ile	Phe	Cys	Asp	Ser	Glu	Glu	Asn	Thr	Glu	Gly	Thr	Ser	
				260					265					270	
Leu	Thr	Gln	Gln	Glu	Ser	Leu	Ser	Arg	Thr	Ile	Pro	Pro	Asp	Lys	
				275					280					285	
Thr	Val	Ile	Glu	Tyr	Glu	Tyr	Asp	Val	Arg	Thr	Thr	Asp	Ile	Cys	
				290					295					300	
Ala	Gly	Pro	Glu	Glu	Gln	Glu	Leu	Ser	Leu	Gln	Glu	Glu	Val	Ser	
				305					310					315	
Thr	Gln	Gly	Thr	Leu	Leu	Glu	Ser	Gln	Ala	Ala	Leu	Ala	Val	Leu	
				320					325					330	
Gly	Pro	Gln	Thr	Leu	Gln	Tyr	Ser	Tyr	Thr	Pro	Gln	Leu	Gln	Asp	
				335					340					345	
Leu	Asp	Pro	Leu	Ala	Gln	Glu	His	Thr	Asp	Ser	Glu	Glu	Gly	Pro	
				350					355					360	
Glu	Glu	Glu	Pro	Ser	Thr	Thr	Leu	Val	Asp	Trp	Asp	Pro	Gln	Thr	
				365					370					375	

Gly Arg Leu Cys Ile Pro Ser Leu Ser Ser Phe Asp Gln Asp Ser
380 385 390

Glu Gly Cys Glu Pro Ser Glu Gly Asp Gly Leu Gly Glu Glu Gly
395 400 405

Leu Leu Ser Arg Leu Tyr Glu Glu Pro Ala Pro Asp Arg Pro Pro
410 415 420

Gly Glu Asn Glu Thr Tyr Leu Met Gln Phe Met Glu Glu Trp Gly
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Leu Tyr Val Gln Met Glu Asn
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<210> 105

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<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 105

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<210> 106

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 106

cagtgtgcca ggactttg 18

<210> 107

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 107

agtcgcaggc agcgttg 18

<210> 108

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 108
ctcctccgag tctgtgtgct cctgc 25

<210> 109
<211> 51
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 109
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c 51

<210> 110
<211> 1114
<212> DNA
<213> Homo sapiens

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<210> 111
<211> 283
<212> PRT
<213> Homo sapiens

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Gly Ala Gln Ile Ile Gly Gly His Glu Val Thr Pro His Ser Arg
35 40 45
Pro Tyr Met Ala Ser Val Arg Phe Gly Gly Gln His His Cys Gly
50 55 60
Gly Phe Leu Leu Arg Ala Arg Trp Val Val Ser Ala Ala His Cys
65 70 75
Phe Ser His Arg Asp Leu Arg Thr Gly Leu Val Val Leu Gly Ala
80 85 90
His Val Leu Ser Thr Ala Glu Pro Thr Gln Gln Val Phe Gly Ile
95 100 105
Asp Ala Leu Thr Thr His Pro Asp Tyr His Pro Met Thr His Ala
110 115 120
Asn Asp Ile Cys Leu Leu Arg Leu Asn Gly Ser Ala Val Leu Gly
125 130 135
Pro Ala Val Gly Leu Leu Arg Leu Pro Gly Arg Arg Ala Arg Pro
140 145 150
Pro Thr Ala Gly Thr Arg Cys Arg Val Ala Gly Trp Gly Phe Val
155 160 165
Ser Asp Phe Glu Glu Leu Pro Pro Gly Leu Met Glu Ala Lys Val
170 175 180
Arg Val Leu Asp Pro Asp Val Cys Asn Ser Ser Trp Lys Gly His
185 190 195
Leu Thr Leu Thr Met Leu Cys Thr Arg Ser Gly Asp Ser His Arg

	200		205		210
Arg Gly Phe Cys Ser Ala Asp Ser Gly Gly Pro Leu Val Cys Arg					
	215		220		225
Asn Arg Ala His Gly Leu Val Ser Phe Ser Gly Leu Trp Cys Gly					
	230		235		240
Asp Pro Lys Thr Pro Asp Val Tyr Thr Gln Val Ser Ala Phe Val					
	245		250		255
Ala Trp Ile Trp Asp Val Val Arg Arg Ser Ser Pro Gln Pro Gly					
	260		265		270
Pro Leu Pro Gly Thr Thr Arg Pro Pro Gly Glu Ala Ala					
	275		280		

<210> 112
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

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<210> 113
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 113
 cgagaaggaa acgaggccgt gag 23

<210> 114
 <211> 44
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 114
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<210> 115
 <211> 1808
 <212> DNA
 <213> Homo sapiens

<400> 115
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cgctgtcggc	gctgggcacg	gtagcaggcg	ccgccgtgct	gctcaaggac	150
tatgtcaccg	gtggggcttg	ccccagcaag	gccaccatcc	ctgggaagac	200
ggtcacgcgtg	acgggcgcga	acacaggcat	cgggaaagcag	accgccttgg	250
aactggccag	gagaggaggc	aacatcatcc	tggcctgccg	agacatggag	300
aagtgtgagg	cggcagcaaa	ggacatccgc	ggggagaccc	tcaatcacca	350
tgtcaacgcc	cggcacctgg	acttggcttc	cctcaagtct	atccgagagt	400
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aacgcgggtg	tgatgcggtg	ccccactgg	accaccgagg	acggcttcga	500
gatgcagttt	ggcgttaacc	acctgggtca	ctttctcttg	acaaacttgc	550
tgctggacaa	gctgaaagcc	tcagccccct	cgcggatcat	caacctctcg	600
tccttgcccc	atgttgctgg	gcacatagac	tttgacgact	tgaactggca	650
gacgaggaag	tataacacca	aagccgccta	ctgccagagc	aagctcgcca	700
tcgtcctctt	caccaaggag	ctgagccggc	ggctgcaagg	ctctggtgtg	750
actgtcaacg	ccctgcaccc	cggcgtggcc	aggacagagc	tgggcagaca	800
cacgggcatc	catggctcca	ccttctccag	caccacactc	gggcccattct	850
tctggctgct	ggtcaagagc	cccgaactgg	ccgccagacc	cagcacatac	900
ctggccgtgg	cggaggaact	ggcggatggt	tccggaaagt	acttcgatgg	950
actcaaacag	aaggcccccg	ccccgaggc	tgaggatgag	gaggtggccc	1000
ggaggctttg	ggctgaaagt	gcccgcctgg	tgggcttaga	ggctccctct	1050
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ggaggaaggg	gctctgtgca	cttgcaggcc	acgtcaggag	agccagcggt	1400
gcctgtcggg	gaggggtcca	aggtgctccg	tgaagagcat	gggcaagttg	1450

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 gtccctctctg agccttggtt tcttcagcag tgagatgctc agaataactg 1550
 ctgtctccca tgatggtgtg gtacagcgag ctgttgtctg gctatggcat 1600
 ggctgtgccg ggggtgtttg ctgagggctt cctgtgccag agcccagcca 1650
 gagagcaggt gcaggtgtca tcccgagttc aggctctgca cggcatggag 1700
 tgggaacccc accagctgct gctacaggac ctgggattgc ctgggactcc 1750
 caccttccca tcaattctca tggtagtcca aactgcagac tctcaaactt 1800
 gctcattt 1808

<210> 116
 <211> 331
 <212> PRT
 <213> Homo sapiens

<400> 116
 Met Ser Arg Tyr Leu Leu Pro Leu Ser Ala Leu Gly Thr Val Ala
 1 5 10 15
 Gly Ala Ala Val Leu Leu Lys Asp Tyr Val Thr Gly Gly Ala Cys
 20 25 30
 Pro Ser Lys Ala Thr Ile Pro Gly Lys Thr Val Ile Val Thr Gly
 35 40 45
 Ala Asn Thr Gly Ile Gly Lys Gln Thr Ala Leu Glu Leu Ala Arg
 50 55 60
 Arg Gly Gly Asn Ile Ile Leu Ala Cys Arg Asp Met Glu Lys Cys
 65 70 75
 Glu Ala Ala Ala Lys Asp Ile Arg Gly Glu Thr Leu Asn His His
 80 85 90
 Val Asn Ala Arg His Leu Asp Leu Ala Ser Leu Lys Ser Ile Arg
 95 100 105
 Glu Phe Ala Ala Lys Ile Ile Glu Glu Glu Glu Arg Val Asp Ile
 110 115 120
 Leu Ile Asn Asn Ala Gly Val Met Arg Cys Pro His Trp Thr Thr
 125 130 135
 Glu Asp Gly Phe Glu Met Gln Phe Gly Val Asn His Leu Gly His
 140 145 150
 Phe Leu Leu Thr Asn Leu Leu Leu Asp Lys Leu Lys Ala Ser Ala
 155 160 165
 Pro Ser Arg Ile Ile Asn Leu Ser Ser Leu Ala His Val Ala Gly
 170 175 180

[Faint, illegible text from bleed-through]

Arg

```
<210> 117
<211> 2249
<212> DNA
<213> Homo sapiens
```

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<400> 117
gaagttcgcg agcgctggca tgtggtcctg gggcgcggtt ggcggcgctg 50
ctggcggtgc tggcgctcgg gacaggagac ccagaaaggg ctgctggctcg 100
gggcgacacg ttctcggcgc tgaccagcgt ggcgcgcgcc ctggcgcccc 150
agcgccggct gctggggctg ctgaggcggt acctgcgcgg ggaggaggcg 200
cggtgcggg acctgactag attctacgac aaggtacttt ctttgcata 250
ggattcaaca acccctgtgg ctaaccctct gcttgcattt actctcatca 300
aacgcctgca gtctgactgg aggaatgtgg tacatagtct ggaggccagt 350
gagaacatcc gagctctgaa ggatggctat gagaaggctg agcaagacct 400
tccagccttt gaggaccttg agggagcagc aagggccctg atcggtctgc 450
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aggacgtgta	catgctcaat	gtgaaaggcc	tggccccgagg	tgtctttcag	500
agagtcactg	gctctgccat	cactgacctg	tacagcccca	aacggctctt	550
ttctctcaca	ggggatgact	gcttccaagt	tggcaagggtg	gcctatgaca	600
tgggggatta	ttaccatgcc	attccatggc	tggaggaggc	tgtcagtctc	650
ttccgaggat	cttacggaga	gtggaagaca	gaggatgagg	caagtctaga	700
agatgccttg	gatcacttgg	cctttgctta	tttccgggca	ggaaatgttt	750
cgtgtgccct	cagcctctct	cgggagtttc	ttctctacag	cccagataat	800
aagaggatgg	ccaggaatgt	cttgaaatat	gaaaggctct	tggcagagag	850
ccccaaccac	gtggtagctg	aggctgtcat	ccagaggccc	aatatacccc	900
acctgcagac	cagagacacc	tacgaggggc	tatgtcagac	cctgggttcc	950
cagcccactc	tctaccagat	ccctagcctc	tactgttcct	atgagaccaa	1000
ttccaacgcc	tacctgctgc	tccagcccat	ccggaaggag	gtcatccacc	1050
tggagcccta	cattgctctc	taccatgact	tcgtcagtga	ctcagaggct	1100
cagaaaatta	gagaacttgc	agaaccatgg	ctacagaggt	cagtgggtggc	1150
atcaggggag	aagcagttac	aagtggagta	ccgcacagc	aaaagtgcct	1200
ggctgaagga	cactgttgac	ccaaaactgg	tgaccctcaa	ccaccgcatt	1250
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ggtggtgaac	tatggcatcg	gaggacacta	tgagcctcac	tttgaccatg	1350
ctacgtcacc	aagcagcccc	ctctacagaa	tgaagtcagg	aaaccgagtt	1400
gcaacattta	tgatctatct	gagctcggtg	gaagctggag	gagccacagc	1450
cttcatctat	gccaacctca	gcgtgcctgt	ggttaggaat	gcagcactgt	1500
tttgggtgaa	cctgcacagg	agtgggtgaag	gggacagtga	cacacttcat	1550
gctggctgtc	ctgtcctggg	gggagataag	tgggtggcca	acaagtggat	1600
acatgagtat	ggacaggaat	tccgcagacc	ctgcagctcc	agccctgaag	1650
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aagccaggag	ccaaaagctg	gggtaggaga	ggagaaagca	gagcagcctc	1750
ctggaagaag	gccttgtcag	ctttgtctgt	gcctcgcaaa	tcagaggcaa	1800
gggagagggt	gttaccaggg	gacactgaga	atgtacattt	gatctgcccc	1850

agccacggaa	gtcagagtag	gatgcacagt	acaaaggagg	ggggagtgga	1900
ggcctgagag	ggaagtttct	ggagttcaga	tactctctgt	tgggaacagg	1950
acatctcaac	agtctcaggt	tcgatcagtg	ggtcttttgg	cactttgaac	2000
cttgaccaca	gggaccaaga	agtggcaatg	aggacacctg	caggaggggc	2050
tagcctgact	cccagaactt	taagactttc	tccccactgc	cttctgctgc	2100
agcccaagca	gggagtgtcc	ccctcccaga	agcatatccc	agatgagtgg	2150
tacattatat	aaggattttt	tttaagttga	aaacaacttt	cttttctttt	2200
tgtatgatgg	ttttttaaca	cagtcattaa	aaatgtttat	aaatcaaaa	2249

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<210> 118
<211> 544
<212> PRT
<213> Homo sapiens
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<400>	118														
Met	Gly	Pro	Gly	Ala	Arg	Leu	Ala	Ala	Leu	Leu	Ala	Val	Leu	Ala	
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Leu	Gly	Thr	Gly	Asp	Pro	Glu	Arg	Ala	Ala	Ala	Arg	Gly	Asp	Thr	
				20					25					30	
Phe	Ser	Ala	Leu	Thr	Ser	Val	Ala	Arg	Ala	Leu	Ala	Pro	Glu	Arg	
				35					40					45	
Arg	Leu	Leu	Gly	Leu	Leu	Arg	Arg	Tyr	Leu	Arg	Gly	Glu	Glu	Ala	
				50					55					60	
Arg	Leu	Arg	Asp	Leu	Thr	Arg	Phe	Tyr	Asp	Lys	Val	Leu	Ser	Leu	
				65					70					75	
His	Glu	Asp	Ser	Thr	Thr	Pro	Val	Ala	Asn	Pro	Leu	Leu	Ala	Phe	
				80					85					90	
Thr	Leu	Ile	Lys	Arg	Leu	Gln	Ser	Asp	Trp	Arg	Asn	Val	Val	His	
				95					100					105	
Ser	Leu	Glu	Ala	Ser	Glu	Asn	Ile	Arg	Ala	Leu	Lys	Asp	Gly	Tyr	
				110					115					120	
Glu	Lys	Val	Glu	Gln	Asp	Leu	Pro	Ala	Phe	Glu	Asp	Leu	Glu	Gly	
				125					130					135	
Ala	Ala	Arg	Ala	Leu	Met	Arg	Leu	Gln	Asp	Val	Tyr	Met	Leu	Asn	
				140					145					150	
Val	Lys	Gly	Leu	Ala	Arg	Gly	Val	Phe	Gln	Arg	Val	Thr	Gly	Ser	
				155					160					165	
Ala	Ile	Thr	Asp	Leu	Tyr	Ser	Pro	Lys	Arg	Leu	Phe	Ser	Leu	Thr	
				170					175					180	

Gly Asp Asp Cys	Phe Gln Val Gly Lys	Val Ala Tyr Asp Met	Gly
185		190	195
Asp Tyr Tyr His	Ala Ile Pro Trp Leu	Glu Glu Ala Val Ser	Leu
200		205	210
Phe Arg Gly Ser	Tyr Gly Glu Trp Lys	Thr Glu Asp Glu Ala	Ser
215		220	225
Leu Glu Asp Ala	Leu Asp His Leu Ala	Phe Ala Tyr Phe Arg	Ala
230		235	240
Gly Asn Val Ser	Cys Ala Leu Ser Leu	Ser Arg Glu Phe Leu	Leu
245		250	255
Tyr Ser Pro Asp	Asn Lys Arg Met Ala	Arg Asn Val Leu Lys	Tyr
260		265	270
Glu Arg Leu Leu	Ala Glu Ser Pro Asn	His Val Val Ala Glu	Ala
275		280	285
Val Ile Gln Arg	Pro Asn Ile Pro His	Leu Gln Thr Arg Asp	Thr
290		295	300
Tyr Glu Gly Leu	Cys Gln Thr Leu Gly	Ser Gln Pro Thr Leu	Tyr
305		310	315
Gln Ile Pro Ser	Leu Tyr Cys Ser Tyr	Glu Thr Asn Ser Asn	Ala
320		325	330
Tyr Leu Leu Leu	Gln Pro Ile Arg Lys	Glu Val Ile His Leu	Glu
335		340	345
Pro Tyr Ile Ala	Leu Tyr His Asp Phe	Val Ser Asp Ser Glu	Ala
350		355	360
Gln Lys Ile Arg	Glu Leu Ala Glu Pro	Trp Leu Gln Arg Ser	Val
365		370	375
Val Ala Ser Gly	Glu Lys Gln Leu Gln	Val Glu Tyr Arg Ile	Ser
380		385	390
Lys Ser Ala Trp	Leu Lys Asp Thr Val	Asp Pro Lys Leu Val	Thr
395		400	405
Leu Asn His Arg	Ile Ala Ala Leu Thr	Gly Leu Asp Val Arg	Pro
410		415	420
Pro Tyr Ala Glu	Tyr Leu Gln Val Val	Asn Tyr Gly Ile Gly	Gly
425		430	435
His Tyr Glu Pro	His Phe Asp His Ala	Thr Ser Pro Ser Ser	Pro
440		445	450
Leu Tyr Arg Met	Lys Ser Gly Asn Arg	Val Ala Thr Phe Met	Ile
455		460	465

Tyr Leu Ser Ser Val Glu Ala Gly Gly Ala Thr Ala Phe Ile Tyr
470 475 480

Ala Asn Leu Ser Val Pro Val Val Arg Asn Ala Ala Leu Phe Trp
485 490 495

Trp Asn Leu His Arg Ser Gly Glu Gly Asp Ser Asp Thr Leu His
500 505 510

Ala Gly Cys Pro Val Leu Val Gly Asp Lys Trp Val Ala Asn Lys
515 520 525

Trp Ile His Glu Tyr Gly Gln Glu Phe Arg Arg Pro Cys Ser Ser
530 535 540

Ser Pro Glu Asp

<210> 119
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 119
cgggacagga gacccagaaa ggg 23

<210> 120
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 120
ggccaagtga tccaaggcat cttc 24

<210> 121
<211> 49
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 121
ctgcgggacc tgactagatt ctacgacaag gtactttctt tgcattgggg 49

<210> 122
<211> 1778
<212> DNA
<213> Homo sapiens

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 ggggagaggg agtgtgcccc tcggggcagg agggaagggc atctggggaa 1500
 gggcaggagg gaagagctgt ccatgcagcc acgcccattg ccaggttggc 1550
 ctcttctcag cctcccaggt gccttgagcc ctcttgcaag ggcggctgct 1600
 tccttgagcc tagttttttt ttacgtgatt tttgtaacat tcattttttt 1650
 gtacagataa caggagtttc tgactaatca aagctgggat ttccccgcat 1700
 gtcttattct tgccttccc ccaaccagtt tgtaatacaa acaataaaaa 1750
 catgttttgt tttgttttta aaaaaaaa 1778

<210> 123

<211> 294

<212> PRT

<213> Homo sapiens

<400> 123

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1				5					10					15
Ser	Tyr	Leu	Trp	Leu	Lys	Phe	Ser	Leu	Ile	Ile	Tyr	Ser	Thr	Val
				20					25					30
Phe	Trp	Leu	Ile	Gly	Ala	Leu	Val	Leu	Ser	Val	Gly	Ile	Tyr	Ala
				35					40					45
Glu	Val	Glu	Arg	Gln	Lys	Tyr	Lys	Thr	Leu	Glu	Ser	Ala	Phe	Leu
				50					55					60
Ala	Pro	Ala	Ile	Ile	Leu	Ile	Leu	Leu	Gly	Val	Val	Met	Phe	Met
				65					70					75
Val	Ser	Phe	Ile	Gly	Val	Leu	Ala	Ser	Leu	Arg	Asp	Asn	Leu	Tyr
				80					85					90
Leu	Leu	Gln	Ala	Phe	Met	Tyr	Ile	Leu	Gly	Ile	Cys	Leu	Ile	Met
				95					100					105
Glu	Leu	Ile	Gly	Gly	Val	Val	Ala	Leu	Thr	Phe	Arg	Asn	Gln	Thr
				110					115					120
Ile	Asp	Phe	Leu	Asn	Asp	Asn	Ile	Arg	Arg	Gly	Ile	Glu	Asn	Tyr
				125					130					135
Tyr	Asp	Asp	Leu	Asp	Phe	Lys	Asn	Ile	Met	Asp	Phe	Val	Gln	Lys
				140					145					150
Lys	Phe	Lys	Cys	Cys	Gly	Gly	Glu	Asp	Tyr	Arg	Asp	Trp	Ser	Lys
				155					160					165
Asn	Gln	Tyr	His	Asp	Cys	Ser	Ala	Pro	Gly	Pro	Leu	Ala	Cys	Gly

[illegible]

170									175					180				
Val	Pro	Tyr	Thr	Cys	Cys	Ile	Arg	Asn	Thr	Thr	Glu	Val	Val	Asn				
				185					190					195				
Thr	Met	Cys	Gly	Tyr	Lys	Thr	Ile	Asp	Lys	Glu	Arg	Phe	Ser	Val				
				200					205					210				
Gln	Asp	Val	Ile	Tyr	Val	Arg	Gly	Cys	Thr	Asn	Ala	Val	Ile	Ile				
				215					220					225				
Trp	Phe	Met	Asp	Asn	Tyr	Thr	Ile	Met	Ala	Cys	Ile	Leu	Leu	Gly				
				230					235					240				
Ile	Leu	Leu	Pro	Gln	Phe	Leu	Gly	Val	Leu	Leu	Thr	Leu	Leu	Tyr				
				245					250					255				
Ile	Thr	Arg	Val	Glu	Asp	Ile	Ile	Met	Glu	His	Ser	Val	Thr	Asp				
				260					265					270				
Gly	Leu	Leu	Gly	Pro	Gly	Ala	Lys	Pro	Ser	Val	Glu	Ala	Ala	Gly				
				275					280					285				
Thr	Gly	Cys	Cys	Leu	Cys	Tyr	Pro	Asn										
				290														

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<210> 124
<211> 25
<212> DNA
<213> Artificial Sequence
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<220>
<223> Synthetic oligonucleotide probe

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<400> 124
atcatctatt ccaccgtggt ctggc 25
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```
<210> 125
<211> 25
<212> DNA
<213> Artificial Sequence
```

<220>
<223> Synthetic oligonucleotide probe

```
<400> 125
gacagagtgc tccatgatga tgtcc 25
```

```
<210> 126
<211> 50
<212> DNA
<213> Artificial Sequence
```

<220>
<223> Synthetic oligonucleotide probe

<400> 126

cctgtctgtg ggcatttatg cagaggttga gcggcagaaa tataaaaccc 50

<210> 127

<211> 1636

<212> DNA

<213> Homo sapiens

<400> 127

gaggagcggg ccgaggactc cagcgtgccc aggtctggca tcctgcactt 50

gctgccctct gacacctggg aagatggccg gcccgaggac cttcaccctt 100

ctctgtgggtt tgctggcagc caccttgatc caagccaccc tcagtccac 150

tgcagttctc atcctcggcc caaaagtcac caaagaaaag ctgacacagg 200

agctgaagga ccacaacgcc accagcatcc tgcagcagct gccgctgctc 250

agtgccatgc gggaaaagcc agccggaggc atccctgtgc tgggcagcct 300

ggtgaacacc gtctgaagc acatcatctg gctgaaggtc atcacagcta 350

acatcctcca gctgcagggtg aagccctcgg ccaatgacca ggagctgcta 400

gtcaagatcc ccctggacat ggtggctgga ttcaacacgc ccctgggtcaa 450

gaccatcgtg gagtccaca tgacgactga ggcccaagcc accatccgca 500

tggacaccag tgcaagtggc cccaccgcgc tggctctcag tgactgtgcc 550

accagccatg ggagcctgcg catccaactg ctgtataagc tctccttctt 600

ggtgaacgcc ttagctaagc aggtcatgaa cctcctagtgc ccatccctgc 650

ccaatctagt gaaaaaccag ctgtgtcccg tgatcgaggc ttccttcaat 700

ggcatgtatg cagacctcct gcagctgggtg aaggtgcca tttccctcag 750

cattgaccgt ctggagtttg accttctgta tcttgccatc aagggtgaca 800

ccattcagct ctacctgggg gccaaagttgt tggactcaca gggaaagggtg 850

accaagtgggt tcaataactc tgcagcttcc ctgacaatgc ccacctgga 900

caacatcccg ttcagcctca tcgtgagtca ggacgtgggtg aaagctgcag 950

tggctgctgt gctctctcca gaagaattca tggctctgtt ggactctgtg 1000

cttcctgaga gtgcccatcg gctgaagtca agcatcgggc tgatcaatga 1050

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aggacactcc cgagtttttt atagaccaag gccatgcca ggtggcccaa 1150

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[illegible]

<210> 128

<212> PRT

<213> Homo sapiens

<400> 128

Met	Ala	Gly	Pro	Trp	Thr	Phe	Thr	Leu	Leu	Cys	Gly	Leu	Leu	Ala
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Ala	Thr	Leu	Ile	Gln	Ala	Thr	Leu	Ser	Pro	Thr	Ala	Val	Leu	Ile
				20					25					30
Leu	Gly	Pro	Lys	Val	Ile	Lys	Glu	Lys	Leu	Thr	Gln	Glu	Leu	Lys
				35					40					45
Asp	His	Asn	Ala	Thr	Ser	Ile	Leu	Gln	Gln	Leu	Pro	Leu	Leu	Ser
				50					55					60
Ala	Met	Arg	Glu	Lys	Pro	Ala	Gly	Gly	Ile	Pro	Val	Leu	Gly	Ser
				65					70					75
Leu	Val	Asn	Thr	Val	Leu	Lys	His	Ile	Ile	Trp	Leu	Lys	Val	Ile
				80					85					90
Thr	Ala	Asn	Ile	Leu	Gln	Leu	Gln	Val	Lys	Pro	Ser	Ala	Asn	Asp
				95					100					105
Gln	Glu	Leu	Leu	Val	Lys	Ile	Pro	Leu	Asp	Met	Val	Ala	Gly	Phe
				110					115					120
Asn	Thr	Pro	Leu	Val	Lys	Thr	Ile	Val	Glu	Phe	His	Met	Thr	Thr
				125					130					135
Glu	Ala	Gln	Ala	Thr	Ile	Arg	Met	Asp	Thr	Ser	Ala	Ser	Gly	Pro
				140					145					150
Thr	Arg	Leu	Val	Leu	Ser	Asp	Cys	Ala	Thr	Ser	His	Gly	Ser	Leu
				155					160					165
Arg	Ile	Gln	Leu	Leu	Tyr	Lys	Leu	Ser	Phe	Leu	Val	Asn	Ala	Leu

170	175	180
Ala Lys Gln Val Met Asn Leu Leu Val	Pro Ser Leu Pro Asn Leu	
185	190	195
Val Lys Asn Gln Leu Cys Pro Val Ile	Glu Ala Ser Phe Asn Gly	
200	205	210
Met Tyr Ala Asp Leu Leu Gln Leu Val	Lys Val Pro Ile Ser Leu	
215	220	225
Ser Ile Asp Arg Leu Glu Phe Asp Leu	Leu Tyr Pro Ala Ile Lys	
230	235	240
Gly Asp Thr Ile Gln Leu Tyr Leu Gly	Ala Lys Leu Leu Asp Ser	
245	250	255
Gln Gly Lys Val Thr Lys Trp Phe Asn	Asn Ser Ala Ala Ser Leu	
260	265	270
Thr Met Pro Thr Leu Asp Asn Ile Pro	Phe Ser Leu Ile Val Ser	
275	280	285
Gln Asp Val Val Lys Ala Ala Val Ala	Ala Val Leu Ser Pro Glu	
290	295	300
Glu Phe Met Val Leu Leu Asp Ser Val	Leu Pro Glu Ser Ala His	
305	310	315
Arg Leu Lys Ser Ser Ile Gly Leu Ile	Asn Glu Lys Ala Ala Asp	
320	325	330
Lys Leu Gly Ser Thr Gln Ile Val Lys	Ile Leu Thr Gln Asp Thr	
335	340	345
Pro Glu Phe Phe Ile Asp Gln Gly His	Ala Lys Val Ala Gln Leu	
350	355	360
Ile Val Leu Glu Val Phe Pro Ser Ser	Glu Ala Leu Arg Pro Leu	
365	370	375
Phe Thr Leu Gly Ile Glu Ala Ser Ser	Glu Ala Gln Phe Tyr Thr	
380	385	390
Lys Gly Asp Gln Leu Ile Leu Asn Leu	Asn Asn Ile Ser Ser Asp	
395	400	405
Arg Ile Gln Leu Met Asn Ser Gly Ile	Gly Trp Phe Gln Pro Asp	
410	415	420
Val Leu Lys Asn Ile Ile Thr Glu Ile	Ile His Ser Ile Leu Leu	
425	430	435
Pro Asn Gln Asn Gly Lys Leu Arg Ser	Gly Val Pro Val Ser Leu	
440	445	450
Val Lys Ala Leu Gly Phe Glu Ala Ala	Glu Ser Ser Leu Thr Lys	

455	460	465
Asp Ala Leu Val Leu Thr Pro Ala Ser Leu Trp Lys Pro Ser Ser		
470	475	480
Pro Val Ser Gln		

<210> 129
 <211> 2213
 <212> DNA
 <213> Homo sapiens

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<212> PRT
<213> Homo sapiens
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Phe	Arg	Arg	Leu	Val 65	Lys	Ala	Pro	Pro	Arg 70	Asn	Tyr	Ser	Val	Ile 75	
Val	Met	Phe	Thr	Ala 80	Leu	Gln	Leu	His	Arg 85	Gln	Cys	Val	Val	Cys 90	
Lys	Gln	Ala	Asp	Glu 95	Glu	Phe	Gln	Ile	Leu 100	Ala	Asn	Ser	Trp	Arg 105	
Tyr	Ser	Ser	Ala	Phe 110	Thr	Asn	Arg	Ile	Phe 115	Phe	Ala	Met	Val	Asp 120	
Phe	Asp	Glu	Gly	Ser 125	Asp	Val	Phe	Gln	Met 130	Leu	Asn	Met	Asn	Ser 135	
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Gly	Asp	Thr	Tyr	Glu 155	Leu	Gln	Val	Arg	Gly 160	Phe	Ser	Ala	Glu	Gln 165	
Ile	Ala	Arg	Trp	Ile 170	Ala	Asp	Arg	Thr	Asp 175	Val	Asn	Ile	Arg	Val 180	
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Glu	Phe	Leu	Phe	Asn 215	Lys	Thr	Gly	Trp	Ala 220	Phe	Ala	Ala	Leu	Cys 225	
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Gly	Pro	Pro	Tyr	Ala 245	His	Lys	Asn	Pro	His 250	Thr	Gly	His	Val	Asn 255	
Tyr	Ile	His	Gly	Ser 260	Ser	Gln	Ala	Gln	Phe 265	Val	Ala	Glu	Thr	His 270	
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Leu	Cys	Glu	Ala	Ala 290	Thr	Ser	Asp	Met	Asp 295	Ile	Gly	Lys	Arg	Lys 300	
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<211> 2476
<212> DNA
<213> Homo sapiens
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cagccaaagc gcccaatgtg gtgctggtcg tgagcgactc cttcgatgga 250
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<210> 132

<211> 536

<212> PRT

<213> Homo sapiens

<400> 132

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Ala Pro Asn Val Val Leu Val Val Ser Asp Ser Phe Asp Gly Arg
35 40 45

Leu Thr Phe His Pro Gly Ser Gln Val Val Lys Leu Pro Phe Ile
50 55 60

Asn Phe Met Lys Thr Arg Gly Thr Ser Phe Leu Asn Ala Tyr Thr
65 70 75

Asn Ser Pro Ile Cys Cys Pro Ser Arg Ala Ala Met Trp Ser Gly
80 85 90

Leu Phe Thr His Leu Thr Glu Ser Trp Asn Asn Phe Lys Gly Leu
95 100 105

Asp Pro Asn Tyr Thr Thr Trp Met Asp Val Met Glu Arg His Gly
110 115 120

Tyr Arg Thr Gln Lys Phe Gly Lys Leu Asp Tyr Thr Ser Gly His
125 130 135

His Ser Ile Ser Asn Arg Val Glu Ala Trp Thr Arg Asp Val Ala
140 145 150

Phe Leu Leu Arg Gln Glu Gly Arg Pro Met Val Asn Leu Ile Arg
155 160 165

Asn Arg Thr Lys Val Arg Val Met Glu Arg Asp Trp Gln Asn Thr
170 175 180

Asp Lys Ala Val Asn Trp Leu Arg Lys Glu Ala Ile Asn Tyr Thr
185 190 195

Glu Pro Phe Val Ile Tyr Leu Gly Leu Asn Leu Pro His Pro Tyr
200 205 210

Pro Ser Pro Ser Ser Gly Glu Asn Phe Gly Ser Ser Thr Phe His
215 220 225

Thr Ser Leu Tyr Trp Leu Glu Lys Val Ser His Asp Ala Ile Lys
230 235 240

Ile Pro Lys Trp Ser Pro Leu Ser Glu Met His Pro Val Asp Tyr
245 250 255

Tyr Ser Ser Tyr Thr Lys Asn Cys Thr Gly Arg Phe Thr Lys Lys	260	265	270
Glu Ile Lys Asn Ile Arg Ala Phe Tyr Tyr Ala Met Cys Ala Glu	275	280	285
Thr Asp Ala Met Leu Gly Glu Ile Ile Leu Ala Leu His Gln Leu	290	295	300
Asp Leu Leu Gln Lys Thr Ile Val Ile Tyr Ser Ser Asp His Gly	305	310	315
Glu Leu Ala Met Glu His Arg Gln Phe Tyr Lys Met Ser Met Tyr	320	325	330
Glu Ala Ser Ala His Val Pro Leu Leu Met Met Gly Pro Gly Ile	335	340	345
Lys Ala Gly Leu Gln Val Ser Asn Val Val Ser Leu Val Asp Ile	350	355	360
Tyr Pro Thr Met Leu Asp Ile Ala Gly Ile Pro Leu Pro Gln Asn	365	370	375
Leu Ser Gly Tyr Ser Leu Leu Pro Leu Ser Ser Glu Thr Phe Lys	380	385	390
Asn Glu His Lys Val Lys Asn Leu His Pro Pro Trp Ile Leu Ser	395	400	405
Glu Phe His Gly Cys Asn Val Asn Ala Ser Thr Tyr Met Leu Arg	410	415	420
Thr Asn His Trp Lys Tyr Ile Ala Tyr Ser Asp Gly Ala Ser Ile	425	430	435
Leu Pro Gln Leu Phe Asp Leu Ser Ser Asp Pro Asp Glu Leu Thr	440	445	450
Asn Val Ala Val Lys Phe Pro Glu Ile Thr Tyr Ser Leu Asp Gln	455	460	465
Lys Leu His Ser Ile Ile Asn Tyr Pro Lys Val Ser Ala Ser Val	470	475	480
His Gln Tyr Asn Lys Glu Gln Phe Ile Lys Trp Lys Gln Ser Ile	485	490	495
Gly Gln Asn Tyr Ser Asn Val Ile Ala Asn Leu Arg Trp His Gln	500	505	510
Asp Trp Gln Lys Glu Pro Arg Lys Tyr Glu Asn Ala Ile Asp Gln	515	520	525
Trp Leu Lys Thr His Met Asn Pro Arg Ala Val	530	535	

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 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Phe Ser Lys Gly Leu Trp Met Glu Cys Ala Thr His Ser Thr Gly
 50 55 60
 Ile Thr Gln Cys Asp Ile Tyr Ser Thr Leu Leu Gly Leu Pro Ala
 65 70 75
 Asp Ile Gln Ala Ala Gln Ala Met Met Val Thr Ser Ser Ala Ile
 80 85 90
 Ser Ser Leu Ala Cys Ile Ile Ser Val Val Gly Met Arg Cys Thr
 95 100 105
 Val Phe Cys Gln Glu Ser Arg Ala Lys Asp Arg Val Ala Val Ala
 110 115 120
 Gly Gly Val Phe Phe Ile Leu Gly Gly Leu Leu Gly Phe Ile Pro
 125 130 135
 Val Ala Trp Asn Leu His Gly Ile Leu Arg Asp Phe Tyr Ser Pro
 140 145 150
 Leu Val Pro Asp Ser Met Lys Phe Glu Ile Gly Glu Ala Leu Tyr
 155 160 165
 Leu Gly Ile Ile Ser Ser Leu Phe Ser Leu Ile Ala Gly Ile Ile
 170 175 180
 Leu Cys Phe Ser Cys Ser Ser Gln Arg Asn Arg Ser Asn Tyr Tyr
 185 190 195
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Pro Gly Gln Pro Pro Lys Val Lys Ser Glu Phe Asn Ser Tyr Ser
215 220 225

Leu Thr Gly Tyr Val
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<210> 135
<211> 610
<212> DNA
<213> Homo sapiens

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<211> 119
<212> PRT
<213> Homo sapiens

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35 40 45
Asn Pro Leu Glu Gln Cys Cys Tyr Asn Asp Ala Ile Val Ser Leu
50 55 60
Ser Glu Thr Arg Gln Cys Gly Pro Pro Cys Thr Phe Trp Pro Cys

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<210> 138
<211> 110
<212> PRT
<213> Homo sapiens

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<210> 140
<211> 311
<212> PRT
<213> Homo sapiens
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<400> 140

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Ala	Ala	Phe	Lys	Val	Ala	Thr	Pro	Tyr	Ser	Leu	Tyr	Val	Cys	Pro	
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Glu	Gly	Gln	Asn	Val	Thr	Leu	Thr	Cys	Arg	Leu	Leu	Gly	Pro	Val	
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Asp	Lys	Gly	His	Asp	Val	Thr	Phe	Tyr	Lys	Thr	Trp	Tyr	Arg	Ser	
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Ser	Arg	Gly	Glu	Val	Gln	Thr	Cys	Ser	Glu	Arg	Arg	Pro	Ile	Arg	
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Ser	Ala	Ser	Asp	His	His	Gly	Asn	Phe	Ser	Ile	Thr	Met	Arg	Asn	
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Ile	Arg	His	His	His	Ser	Glu	His	Arg	Val	His	Gly	Ala	Met	Glu	
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Leu	Gln	Val	Gln	Thr	Gly	Lys	Asp	Ala	Pro	Ser	Asn	Cys	Val	Val	
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Tyr	Pro	Ser	Ser	Ser	Gln	Asp	Ser	Glu	Asn	Ile	Thr	Ala	Ala	Ala	
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Leu	Ala	Thr	Gly	Ala	Cys	Ile	Val	Gly	Ile	Leu	Cys	Leu	Pro	Leu	
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Arg	Ala	Gln	Glu	Leu	Val	Arg	Met	Asp	Ser	Asn	Ile	Gln	Gly	Ile	
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Glu	Asn	Pro	Gly	Phe	Glu	Ala	Ser	Pro	Pro	Ala	Gln	Gly	Ile	Pro	
				245					250					255	
Glu	Ala	Lys	Val	Arg	His	Pro	Leu	Ser	Tyr	Val	Ala	Gln	Arg	Gln	
				260					265					270	
Pro	Ser	Glu	Ser	Gly	Arg	His	Leu	Leu	Ser	Glu	Pro	Ser	Thr	Pro	

275	280	285
Leu Ser Pro Pro Gly Pro Gly Asp Val	Phe Phe Pro Ser Leu Asp	
290	295	300
Pro Val Pro Asp Ser Pro Asn Phe Glu	Val Ile	
305	310	

<210> 141
 <211> 1732
 <212> DNA
 <213> Homo sapiens

<400> 141
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 cttagacctc ctttctgtcc ctctttctct gccaccgct gcttctggc 150
 cttctccga cccgcgtcta gcagcagacc tcttggggtc tgtgggttga 200
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 ccgctcccg accagcggcc tgacctggg gaaaggatgg ttcccgaggt 300
 gagggctctc tctctcttgc tgggactcgc gctgctctgg ttccccctgg 350
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 gatgtactgc ctgcgtgta cctgtcaga gggcgcccat gtgagttgtt 500
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 cagcaatgct gtcccaagtg tgtggaacct cacactcct ctggactccg 600
 ggccccacca aagtccctgcc agcacaacgg gacctgtac caacacggag 650
 agatcttcag tgcccatgag ctgttccct cccgcctgcc caaccagtgt 700
 gtctctgca gctgcacaga gggccagatc tactgaggcc tcacaacctg 750
 cccgaacca ggctgccag caccctccc actgccagac tctgtctgcc 800
 aagcctgcaa agatgaggca agtgagcaat cggatgaaga ggacagtgtg 850
 cagtcgtcc atggggtgag acatcctcag gatccatgtt ccagtgatgc 900
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tcggccccctt gccctgcac cttatgcacct gtgaggatgg ccgccaggac 1150
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 gccacagtga gatcagttct accaggtgtc ccaaggcacc gggccgggtc 1300
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 gatatgagct gtataattgt tggtattata tattaataaa taagaagttg 1700
 cattaccctc aaaaaaaaaa aaaaaaaaaa aa 1732

<210> 142
 <211> 451
 <212> PRT
 <213> Homo sapiens

<400> 142
 Met Val Pro Glu Val Arg Val Leu Ser Ser Leu Leu Gly Leu Ala
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 Met Phe Cys Leu Phe His Gly Lys Arg Tyr Ser Pro Gly Glu Ser
 35 40 45
 Trp His Pro Tyr Leu Glu Pro Gln Gly Leu Met Tyr Cys Leu Arg
 50 55 60
 Cys Thr Cys Ser Glu Gly Ala His Val Ser Cys Tyr Arg Leu His
 65 70 75
 Cys Pro Pro Val His Cys Pro Gln Pro Val Thr Glu Pro Gln Gln
 80 85 90
 Cys Cys Pro Lys Cys Val Glu Pro His Thr Pro Ser Gly Leu Arg
 95 100 105
 Ala Pro Pro Lys Ser Cys Gln His Asn Gly Thr Met Tyr Gln His
 110 115 120

Gly	Glu	Ile	Phe	Ser	Ala	His	Glu	Leu	Phe	Pro	Ser	Arg	Leu	Pro
				125					130					135
Asn	Gln	Cys	Val	Leu	Cys	Ser	Cys	Thr	Glu	Gly	Gln	Ile	Tyr	Cys
				140					145					150
Gly	Leu	Thr	Thr	Cys	Pro	Glu	Pro	Gly	Cys	Pro	Ala	Pro	Leu	Pro
				155					160					165
Leu	Pro	Asp	Ser	Cys	Cys	Gln	Ala	Cys	Lys	Asp	Glu	Ala	Ser	Glu
				170					175					180
Gln	Ser	Asp	Glu	Glu	Asp	Ser	Val	Gln	Ser	Leu	His	Gly	Val	Arg
				185					190					195
His	Pro	Gln	Asp	Pro	Cys	Ser	Ser	Asp	Ala	Gly	Arg	Lys	Arg	Gly
				200					205					210
Pro	Gly	Thr	Pro	Ala	Pro	Thr	Gly	Leu	Ser	Ala	Pro	Leu	Ser	Phe
				215					220					225
Ile	Pro	Arg	His	Phe	Arg	Pro	Lys	Gly	Ala	Gly	Ser	Thr	Thr	Val
				230					235					240
Lys	Ile	Val	Leu	Lys	Glu	Lys	His	Lys	Lys	Ala	Cys	Val	His	Gly
				245					250					255
Gly	Lys	Thr	Tyr	Ser	His	Gly	Glu	Val	Trp	His	Pro	Ala	Phe	Arg
				260					265					270
Ala	Phe	Gly	Pro	Leu	Pro	Cys	Ile	Leu	Cys	Thr	Cys	Glu	Asp	Gly
				275					280					285
Arg	Gln	Asp	Cys	Gln	Arg	Val	Thr	Cys	Pro	Thr	Glu	Tyr	Pro	Cys
				290					295					300
Arg	His	Pro	Glu	Lys	Val	Ala	Gly	Lys	Cys	Cys	Lys	Ile	Cys	Pro
				305					310					315
Glu	Asp	Lys	Ala	Asp	Pro	Gly	His	Ser	Glu	Ile	Ser	Ser	Thr	Arg
				320					325					330
Cys	Pro	Lys	Ala	Pro	Gly	Arg	Val	Leu	Val	His	Thr	Ser	Val	Ser
				335					340					345
Pro	Ser	Pro	Asp	Asn	Leu	Arg	Arg	Phe	Ala	Leu	Glu	His	Glu	Ala
				350					355					360
Ser	Asp	Leu	Val	Glu	Ile	Tyr	Leu	Trp	Lys	Leu	Val	Lys	Asp	Glu
				365					370					375
Glu	Thr	Glu	Ala	Gln	Arg	Gly	Glu	Val	Pro	Gly	Pro	Arg	Pro	His
				380					385					390
Ser	Gln	Asn	Leu	Pro	Leu	Asp	Ser	Asp	Gln	Glu	Ser	Gln	Glu	Ala
				395					400					405

Arg	Leu	Pro	Glu	Arg 410	Gly	Thr	Ala	Leu	Pro 415	Thr	Ala	Arg	Trp	Pro 420
Pro	Arg	Arg	Ser	Leu 425	Glu	Arg	Leu	Pro	Ser 430	Pro	Asp	Pro	Gly	Ala 435
Glu	Gly	His	Gly	Gln 440	Ser	Arg	Gln	Ser	Asp 445	Gln	Asp	Ile	Thr	Lys 450

Thr

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<210> 143
<211> 693
<212> DNA
<213> Homo sapiens
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<400> 143
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cggggagctc ccgtgggcgc tccgctggct gtgcaggcgg ccatggattc 100
cttgcggaaa atgctgatct cagtcgcaat gctgggcgca ggggctggcg 150
tgggctacgc gtcctcgtt atcgtgaccc cgggagagcg gcggaagcag 200
gaaatgctaa aggagatgcc actgcaggac ccaaggagca gggaggaggc 250
ggccaggacc cagcagctat tgctggccac tctgcaggag gcagcgacca 300
cgcaggagaa cgtggcctgg aggaagaact ggatggttgg cggcgaaggc 350
ggcgccagcg ggaggtcacc gtgagaccgg acttgcctcc gtgggcgccg 400
gaccttggct tgggcgcagg aatccgaggc agcctttctc cttcgtgggc 450
ccagcggaga gtccggaccg agataccatg ccaggactct ccggggtcct 500
gtgagctgcc gtcggttgag cacgtttccc ccaaaccctg gactgactgc 550
tttaaggtcc gcaaggcggg ccagggccga gacgcgagtc ggatgtggtg 600
aactgaaaga accaataaaa tcatgttcct ccaaaaaaaaaa aaaaaaaaaa 650
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaa 693
```

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<210> 144
<211> 93
<212> PRT
<213> Homo sapiens
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<400> 144
Met Asp Ser Leu Arg Lys Met Leu Ile Ser Val Ala Met Leu Gly
  1                    5                10                15

Ala Gly Ala Gly Val Gly Tyr Ala Leu Leu Val Ile Val Thr Pro
                20                25                30

```


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aaggtctttg	ggctgtctat	gccacccggg	aggatgacag	gcacttgtgt	1000
ctggccaagt	tagatccaca	gacactggac	acagagcagc	agtgggacac	1050
accatgtccc	agagagaatg	ctgaggctgc	ctttgtcatc	tgtgggaccc	1100
tctatgtcgt	ctataacacc	cgtcctgcc	gtcggggccc	catccagtgc	1150
tcctttgatg	ccagcggcac	cctgaccctt	gaacgggcag	cactccctta	1200
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aacgccagct	ctatgcctgg	gatgatggct	accagattgt	ctataagctg	1300
gagatgagga	agaaagagga	ggaggtttga	ggagctagcc	ttgttttttg	1350
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aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaa	1883	

<210> 146

<211> 406

<212> PRT

<213> Homo sapiens

<400> 146

Met Gly Pro Ser Thr Pro Leu Leu Ile Leu Phe Leu Leu Ser Trp
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Ser Gly Pro Leu Gln Gly Gln Gln His His Leu Val Glu Tyr Met
20 25 30

Glu Arg Arg Leu Ala Ala Leu Glu Glu Arg Leu Ala Gln Cys Gln
35 40 45

Asp Gln Ser Ser Arg His Ala Ala Glu Leu Arg Asp Phe Lys Asn

				50					55					60
Lys	Met	Leu	Pro	Leu 65	Leu	Glu	Val	Ala	Glu 70	Lys	Glu	Arg	Glu	Ala 75
Leu	Arg	Thr	Glu	Ala 80	Asp	Thr	Ile	Ser	Gly 85	Arg	Val	Asp	Arg	Leu 90
Glu	Arg	Glu	Val	Asp 95	Tyr	Leu	Glu	Thr	Gln 100	Asn	Pro	Ala	Leu	Pro 105
Cys	Val	Glu	Phe	Asp 110	Glu	Lys	Val	Thr	Gly 115	Gly	Pro	Gly	Thr	Lys 120
Gly	Lys	Gly	Arg	Arg 125	Asn	Glu	Lys	Tyr	Asp 130	Met	Val	Thr	Asp	Cys 135
Gly	Tyr	Thr	Ile	Ser 140	Gln	Val	Arg	Ser	Met 145	Lys	Ile	Leu	Lys	Arg 150
Phe	Gly	Gly	Pro	Ala 155	Gly	Leu	Trp	Thr	Lys 160	Asp	Pro	Leu	Gly	Gln 165
Thr	Glu	Lys	Ile	Tyr 170	Val	Leu	Asp	Gly	Thr 175	Gln	Asn	Asp	Thr	Ala 180
Phe	Val	Phe	Pro	Arg 185	Leu	Arg	Asp	Phe	Thr 190	Leu	Ala	Met	Ala	Ala 195
Arg	Lys	Ala	Ser	Arg 200	Val	Arg	Val	Pro	Phe 205	Pro	Trp	Val	Gly	Thr 210
Gly	Gln	Leu	Val	Tyr 215	Gly	Gly	Phe	Leu	Tyr 220	Phe	Ala	Arg	Arg	Pro 225
Pro	Gly	Arg	Pro	Gly 230	Gly	Gly	Gly	Glu	Met 235	Glu	Asn	Thr	Leu	Gln 240
Leu	Ile	Lys	Phe	His 245	Leu	Ala	Asn	Arg	Thr 250	Val	Val	Asp	Ser	Ser 255
Val	Phe	Pro	Ala	Glu 260	Gly	Leu	Ile	Pro	Pro 265	Tyr	Gly	Leu	Thr	Ala 270
Asp	Thr	Tyr	Ile	Asp 275	Leu	Val	Ala	Asp	Glu 280	Glu	Gly	Leu	Trp	Ala 285
Val	Tyr	Ala	Thr	Arg 290	Glu	Asp	Asp	Arg	His 295	Leu	Cys	Leu	Ala	Lys 300
Leu	Asp	Pro	Gln	Thr 305	Leu	Asp	Thr	Glu	Gln 310	Gln	Trp	Asp	Thr	Pro 315
Cys	Pro	Arg	Glu	Asn 320	Ala	Glu	Ala	Ala	Phe 325	Val	Ile	Cys	Gly	Thr 330
Leu	Tyr	Val	Val	Tyr	Asn	Thr	Arg	Pro	Ala	Ser	Arg	Ala	Arg	Ile

				335					340					345
Gln	Cys	Ser	Phe	Asp 350	Ala	Ser	Gly	Thr	Leu 355	Thr	Pro	Glu	Arg	Ala 360
Ala	Leu	Pro	Tyr	Phe 365	Pro	Arg	Arg	Tyr	Gly 370	Ala	His	Ala	Ser	Leu 375
Arg	Tyr	Asn	Pro	Arg 380	Glu	Arg	Gln	Leu	Tyr 385	Ala	Trp	Asp	Asp	Gly 390
Tyr	Gln	Ile	Val	Tyr 395	Lys	Leu	Glu	Met	Arg 400	Lys	Lys	Glu	Glu	Glu 405

Val

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<210> 147
<211> 2052
<212> DNA
<213> Homo sapiens
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<400> 147
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gttctcctct tctctctaata ccatccgtca cctctcctgt catccgtttc 150
catgccgtga ggtccattca cagaacacat ccatggctct catgctcagt 200
ttggttctga gtctcctcaa gctgggatca gggcagtggc aggtgtttgg 250
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aggggccagt tctctagcgt ggtccacctc tacagggacg ggaaggacca 400
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tccatgcggc atgtcatctt gagccgagag gtggaatcca gggtacagat 850
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 aagggcctct gcaatcccag agacaagcaa cagtgagtcc tctcacagg 1650
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 ccacctctca ggtgaagaac cgtcaggaat tcccatctca caggctgtgg 1950
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 acagagtgta tcctaattgt ttgttcatta tattacactt tcagtaaaaa 2050
 aa 2052

<210> 148
 <211> 500
 <212> PRT
 <213> Homo sapiens

<400> 148
 Met Ala Leu Met Leu Ser Leu Val Leu Ser Leu Leu Lys Leu Gly

1	5	10	15
Ser Gly Gln Trp Gln Val Phe Gly Pro Asp Lys Pro Val Gln Ala	20	25	30
Leu Val Gly Glu Asp Ala Ala Phe Ser Cys Phe Leu Ser Pro Lys	35	40	45
Thr Asn Ala Glu Ala Met Glu Val Arg Phe Phe Arg Gly Gln Phe	50	55	60
Ser Ser Val Val His Leu Tyr Arg Asp Gly Lys Asp Gln Pro Phe	65	70	75
Met Gln Met Pro Gln Tyr Gln Gly Arg Thr Lys Leu Val Lys Asp	80	85	90
Ser Ile Ala Glu Gly Arg Ile Ser Leu Arg Leu Glu Asn Ile Thr	95	100	105
Val Leu Asp Ala Gly Leu Tyr Gly Cys Arg Ile Ser Ser Gln Ser	110	115	120
Tyr Tyr Gln Lys Ala Ile Trp Glu Leu Gln Val Ser Ala Leu Gly	125	130	135
Ser Val Pro Leu Ile Ser Ile Thr Gly Tyr Val Asp Arg Asp Ile	140	145	150
Gln Leu Leu Cys Gln Ser Ser Gly Trp Phe Pro Arg Pro Thr Ala	155	160	165
Lys Trp Lys Gly Pro Gln Gly Gln Asp Leu Ser Thr Asp Ser Arg	170	175	180
Thr Asn Arg Asp Met His Gly Leu Phe Asp Val Glu Ile Ser Leu	185	190	195
Thr Val Gln Glu Asn Ala Gly Ser Ile Ser Cys Ser Met Arg His	200	205	210
Ala His Leu Ser Arg Glu Val Glu Ser Arg Val Gln Ile Gly Asp	215	220	225
Thr Phe Phe Glu Pro Ile Ser Trp His Leu Ala Thr Lys Val Leu	230	235	240
Gly Ile Leu Cys Cys Gly Leu Phe Phe Gly Ile Val Gly Leu Lys	245	250	255
Ile Phe Phe Ser Lys Phe Gln Trp Lys Ile Gln Ala Glu Leu Asp	260	265	270
Trp Arg Arg Lys His Gly Gln Ala Glu Leu Arg Asp Ala Arg Lys	275	280	285
His Ala Val Glu Val Thr Leu Asp Pro Glu Thr Ala His Pro Lys			

290					295					300				
Leu	Cys	Val	Ser	Asp 305	Leu	Lys	Thr	Val	Thr 310	His	Arg	Lys	Ala	Pro 315
Gln	Glu	Val	Pro	His 320	Ser	Glu	Lys	Arg	Phe 325	Thr	Arg	Lys	Ser	Val 330
Val	Ala	Ser	Gln	Ser 335	Phe	Gln	Ala	Gly	Lys 340	His	Tyr	Trp	Glu	Val 345
Asp	Gly	Gly	His	Asn 350	Lys	Arg	Trp	Arg	Val 355	Gly	Val	Cys	Arg	Asp 360
Asp	Val	Asp	Arg	Arg 365	Lys	Glu	Tyr	Val	Thr 370	Leu	Ser	Pro	Asp	His 375
Gly	Tyr	Trp	Val	Leu 380	Arg	Leu	Asn	Gly	Glu 385	His	Leu	Tyr	Phe	Thr 390
Leu	Asn	Pro	Arg	Phe 395	Ile	Ser	Val	Phe	Pro 400	Arg	Thr	Pro	Pro	Thr 405
Lys	Ile	Gly	Val	Phe 410	Leu	Asp	Tyr	Glu	Cys 415	Gly	Thr	Ile	Ser	Phe 420
Phe	Asn	Ile	Asn	Asp 425	Gln	Ser	Leu	Ile	Tyr 430	Thr	Leu	Thr	Cys	Arg 435
Phe	Glu	Gly	Leu	Leu 440	Arg	Pro	Tyr	Ile	Glu 445	Tyr	Pro	Ser	Tyr	Asn 450
Glu	Gln	Asn	Gly	Thr 455	Pro	Ile	Val	Ile	Cys 460	Pro	Val	Thr	Gln	Glu 465
Ser	Glu	Lys	Glu	Ala 470	Ser	Trp	Gln	Arg	Ala 475	Ser	Ala	Ile	Pro	Glu 480
Thr	Ser	Asn	Ser	Glu 485	Ser	Ser	Ser	Gln	Ala 490	Thr	Thr	Pro	Phe	Leu 495
Pro	Arg	Gly	Glu	Met 500										

<210> 149

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 149

gcgtgggtcca cctctacagg gacg 24

<210> 150

<211> 23

SECRET

<220>
<223> Synthetic oligonucleotide probe

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<400> 150
ggaactgacc cagtgctgac acc 23
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<210> 151
<211> 45
<212> DNA
<213> Artificial Sequence
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<220>
<223> Synthetic oligonucleotide probe

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<400> 151
gcagatgcca cagtatcaag gcaggacaaa actggtgaag gattc 45
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<210> 152
<211> 2294
<212> DNA
<213> Homo sapiens
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<400> 152
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aatgaatggc ggagccgagc gcgccatgag gagcctgccg agcctggggc 150
gcctcgccct gttgtgctgc gccgccgccg ccgccgccgt cgcctcagcc 200
gcctcgggcg ggaatgtcac cggtgggcgc gggggccgcg ggcagggtgga 250
cgcgtcgccg ggccccgggt tgcggggcga gcccagccac cccttcctta 300
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tgccccggcg ccgaccaccc ctgtagcgac caccgtaccg gcgcccacga 600
ctccccggac cccgaccccc gatctcccca gcagcagcaa cagcagcgtc 650
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agaccacagg gcagtgtgag tgtcgggccg gttatcaggg gcttcactgt 800

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gaaacctgca aagagggcctt ttacctaaat tacacttctg ggctctgtca 850
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aaaaggctgc tactctcaag gaccatactg gtttaaacia aggaggatga 1000
gggtcataga ttacaaaaat attttatata cttttattct cttactttat 1050
atgttatatt taatgtcagg atttaaaaac atctaattta ctgatttagt 1100
tcttcaaaaag cactagagtc gccaatTTTT ctctgggata atttctgtaa 1150
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ttcaggcatg aaacctgcta ggaggttttag aaatgttctt atgtttatta 1250
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taatcaaat tctacatttg tttctttgga catctaaagc ttaacctggg 1350
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taccagtaca tttttgagac caaaagtaga ttaagcagga attatcttta 1450
aactattatg ttatttgag gtaatttaat ctagtggaat aatgtactgt 1500
tatctaagca tttgccttgt actgcactga aagtaattat tctttgacct 1550
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acagtattaa ataatgaaaa aaataatgac aggttatact cagtgttaacc 1650
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ctggtttggt ttaatttcaa aggaatatta tggactgaaa tgagagaaca 1850
tgttttaaga acttttagct ccttgacaaa gaagtgtttt atacttttagc 1900
actaaatatt ttaaatgctt tataaatgat attatactgt tatggaatat 1950
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tcccagctac tcgggaggct gaggcaggag aatcggttga acccgggagg 2200

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agagggagac tctgtcttaa aaaaaaaaaa aaaaaaaaaa aaaa 2294

<210> 153

<211> 258

<212> PRT

<213> Homo sapiens

<400> 153

Met	Arg	Ser	Leu	Pro	Ser	Leu	Gly	Gly	Leu	Ala	Leu	Leu	Cys	Cys	1	5	10	15
Ala	Ala	Ala	Ala	Ala	Ala	Val	Ala	Ser	Ala	Ala	Ser	Ala	Gly	Asn	20	25	30	
Val	Thr	Gly	Gly	Gly	Gly	Ala	Ala	Gly	Gln	Val	Asp	Ala	Ser	Pro	35	40	45	
Gly	Pro	Gly	Leu	Arg	Gly	Glu	Pro	Ser	His	Pro	Phe	Pro	Arg	Ala	50	55	60	
Thr	Ala	Pro	Thr	Ala	Gln	Ala	Pro	Arg	Thr	Gly	Pro	Pro	Arg	Ala	65	70	75	
Thr	Val	His	Arg	Pro	Leu	Ala	Ala	Thr	Ser	Pro	Ala	Gln	Ser	Pro	80	85	90	
Glu	Thr	Thr	Pro	Leu	Trp	Ala	Thr	Ala	Gly	Pro	Ser	Ser	Thr	Thr	95	100	105	
Phe	Gln	Ala	Pro	Leu	Gly	Pro	Ser	Pro	Thr	Thr	Pro	Pro	Ala	Ala	110	115	120	
Glu	Arg	Thr	Ser	Thr	Thr	Ser	Gln	Ala	Pro	Thr	Arg	Pro	Ala	Pro	125	130	135	
Thr	Thr	Leu	Ser	Thr	Thr	Thr	Gly	Pro	Ala	Pro	Thr	Thr	Pro	Val	140	145	150	
Ala	Thr	Thr	Val	Pro	Ala	Pro	Thr	Thr	Pro	Arg	Thr	Pro	Thr	Pro	155	160	165	
Asp	Leu	Pro	Ser	Ser	Ser	Asn	Ser	Ser	Val	Leu	Pro	Thr	Pro	Pro	170	175	180	
Ala	Thr	Glu	Ala	Pro	Ser	Ser	Pro	Pro	Pro	Glu	Tyr	Val	Cys	Asn	185	190	195	
Cys	Ser	Val	Val	Gly	Ser	Leu	Asn	Val	Asn	Arg	Cys	Asn	Gln	Thr	200	205	210	
Thr	Gly	Gln	Cys	Glu	Cys	Arg	Pro	Gly	Tyr	Gln	Gly	Leu	His	Cys	215	220	225	
Glu	Thr	Cys	Lys	Glu	Gly	Phe	Tyr	Leu	Asn	Tyr	Thr	Ser	Gly	Leu	230	235	240	

[The following text is extremely faint and largely illegible due to poor scan quality. It appears to be a list or index of names and dates.]

Cys Asn Arg

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<210> 154
<211> 24
<212> DNA
<213> Artificial Sequence
```

<220>
<223> Synthetic oligonucleotide probe

```
<400> 154
aactgctctg tggttggaag cctg 24
```

```
<210> 155
<211> 24
<212> DNA
<213> Artificial Sequence
```

<220>
<223> Synthetic oligonucleotide probe

```
<400> 155
cagtcacatg gctgacagac ccac 24
```

```
<210> 156
<211> 38
<212> DNA
<213> Artificial Sequence
```

<220>
<223> Synthetic oligonucleotide probe

```
<400> 156
aggttatcag gggcttcact gtgaaacctg caaagagg 38
```

```
<210> 157
<211> 689
<212> DNA
<213> Homo sapiens
```

```
<400> 157
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ttctggcttt ggtctcggtg cccagggccc aggccgtgtg gttgggaaga 100
ctggacctg agcagcttct tgggccctgg tacgtgcttg cggtggcctc 150
ccgggaaaag ggctttgcc a tgagaagga catgaagaac gtcgtggggg 200
tggtggtgac cctcactcca gaaaacaacc tgcggacgct gtcctctcag 250
cacgggctgg gaggggtgtga ccagagtgtc atggacctga taaagcga 300
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ctccggatgg gtgtttgaga atccctcaat aggcgtgctg gagctctggg 350
 tgctggccac caacttcaga gactatgcca tcattttcac tcagctggag 400
 ttccggggacg agcccttcaa caccgtggag ctgtacagtc tgacggagac 450
 agccagccag gaggccatgg ggctcttcac caagtggagc aggagcctgg 500
 gcttctgtgc acagtagcag gccagctgc agaaggacct cacctgtgct 550
 cacaagatcc ttctgtgagt gctgcgtccc cagtagggat ggcgcccaca 600
 gggctctgtg acctcgcca gtgtccaccc acctcgctca gcggctcccg 650
 gggcccagca ccagctcaga ataaagcgat tccacagca 689

<210> 158
 <211> 163
 <212> PRT
 <213> Homo sapiens

<400> 158
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 1 5 10 15
 Pro Arg Ala Gln Ala Val Trp Leu Gly Arg Leu Asp Pro Glu Gln
 20 25 30
 Leu Leu Gly Pro Trp Tyr Val Leu Ala Val Ala Ser Arg Glu Lys
 35 40 45
 Gly Phe Ala Met Glu Lys Asp Met Lys Asn Val Val Gly Val Val
 50 55 60
 Val Thr Leu Thr Pro Glu Asn Asn Leu Arg Thr Leu Ser Ser Gln
 65 70 75
 His Gly Leu Gly Gly Cys Asp Gln Ser Val Met Asp Leu Ile Lys
 80 85 90
 Arg Asn Ser Gly Trp Val Phe Glu Asn Pro Ser Ile Gly Val Leu
 95 100 105
 Glu Leu Trp Val Leu Ala Thr Asn Phe Arg Asp Tyr Ala Ile Ile
 110 115 120
 Phe Thr Gln Leu Glu Phe Gly Asp Glu Pro Phe Asn Thr Val Glu
 125 130 135
 Leu Tyr Ser Leu Thr Glu Thr Ala Ser Gln Glu Ala Met Gly Leu
 140 145 150
 Phe Thr Lys Trp Ser Arg Ser Leu Gly Phe Leu Ser Gln
 155 160

<210> 159

(continued from page 6)

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gtaaactgct	gacgatgcag	agttccgtga	cggtgcagga	aggcctgtgt	150
gtccatgtgc	cctgctcctt	ctcctacccc	tcgcatggct	ggatttacct	200
tggcccagta	gttcatggct	actggttccg	ggaaggggcc	aatacagacc	250
aggatgctcc	agtggccaca	aacaaccacg	ctcgggcagt	gtgggaggag	300
actcgggacc	gattccacct	ccttggggac	ccacatacca	agaattgcac	350
cctgagcatc	agagatgcca	gaagaagtga	tgcggggaga	tactttcttc	400
gtatggagaa	aggaagtata	aaatggaatt	ataaacatca	ccggctctct	450
gtgaatgtga	cagccttgac	ccacaggccc	aacatcctca	tcccaggcac	500
cctggagtc	ggctgcccc	agaatctgac	ctgctctgtg	ccctgggcct	550
gtgagcaggg	gacaccccct	atgatctcct	ggatagggac	ctccgtgtcc	600
cccctggacc	cctccaccac	ccgtctctcg	gtgctcacc	tcatcccaca	650
gccccaggac	catggcacca	gcctcacctg	tcaggtgacc	ttccctgggg	700
ccagcgtgac	cacgaacaag	accgtccatc	tcaacgtgtc	ctaccgcct	750
cagaacttga	ccatgactgt	cttccaagga	gacggcacag	tatccacagt	800
cttgggaaat	ggctcatctc	tgtcactccc	agagggccag	tctctgcgcc	850
tggctctgtc	agttgatgca	gttgacagca	atccccctgc	caggctgagc	900
ctgagctgga	gaggcctgac	cctgtgcccc	tcacagccct	caaaccggg	950
ggtgctggag	ctgccttggg	tgcacctgag	ggatgcagct	gaattcacct	1000
gcagagctca	gaacctctc	ggctctcagc	aggtctacct	gaacgtctcc	1050
ctgcagagca	aagccacatc	aggagtgact	cagggggtgg	tcgggggagc	1100
tggagccaca	gccctggtct	tcctgtcctt	ctgcgtcatc	ttcgttgtag	1150
tgaggctctg	caggaagaaa	tcggcaaggc	cagcagcggg	cgtgggagat	1200
acgggcatag	aggatgcaaa	cgtgttcagg	ggttcagcct	ctcaggggcc	1250
cctgactqaa	ccttgggcag	aaqacagtcc	cccagaccag	cctccccacg	1300

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cttctgccccg ctcctcagtg ggggaaggag agctccagta tgcattccctc 1350
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caccgagtac tcggagatca agatccacag atgagaaact gcagagactc 1450
accctgattg agggatcaca gccctccag gcaagggaga agtcagaggc 1500
tgattcttgt agaattaaca gccctcaacg tgatgagcta tgataaact 1550
atgaattatg tgcagagtga aaagcacaca ggcttttagag tcaaagtatc 1600
tcaaacctga atccacactg tgcctccct tttatttttt taactaaaag 1650
acagacaaat tccta 1665

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<210> 160
<211> 463
<212> PRT
<213> Homo sapiens
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<400> 160														
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Glu	Gly	Gln	Thr	Ser	Lys	Leu	Leu	Thr	Met	Gln	Ser	Ser	Val	Thr
				20					25					30
Val	Gln	Glu	Gly	Leu	Cys	Val	His	Val	Pro	Cys	Ser	Phe	Ser	Tyr
				35					40					45
Pro	Ser	His	Gly	Trp	Ile	Tyr	Pro	Gly	Pro	Val	Val	His	Gly	Tyr
				50					55					60
Trp	Phe	Arg	Glu	Gly	Ala	Asn	Thr	Asp	Gln	Asp	Ala	Pro	Val	Ala
				65					70					75
Thr	Asn	Asn	Pro	Ala	Arg	Ala	Val	Trp	Glu	Glu	Thr	Arg	Asp	Arg
				80					85					90
Phe	His	Leu	Leu	Gly	Asp	Pro	His	Thr	Lys	Asn	Cys	Thr	Leu	Ser
				95					100					105
Ile	Arg	Asp	Ala	Arg	Arg	Ser	Asp	Ala	Gly	Arg	Tyr	Phe	Phe	Arg
				110					115					120
Met	Glu	Lys	Gly	Ser	Ile	Lys	Trp	Asn	Tyr	Lys	His	His	Arg	Leu
				125					130					135
Ser	Val	Asn	Val	Thr	Ala	Leu	Thr	His	Arg	Pro	Asn	Ile	Leu	Ile
				140					145					150
Pro	Gly	Thr	Leu	Glu	Ser	Gly	Cys	Pro	Gln	Asn	Leu	Thr	Cys	Ser
				155					160					165
Val	Pro	Trp	Ala	Cys	Glu	Gln	Gly	Thr	Pro	Pro	Met	Ile	Ser	Trp
				170					175					180

Ile Gly Thr Ser	Val Ser Pro Leu Asp	Pro Ser Thr Thr Arg Ser
	185	190 195
Ser Val Leu Thr	Leu Ile Pro Gln Pro	Gln Asp His Gly Thr Ser
	200	205 210
Leu Thr Cys Gln	Val Thr Phe Pro Gly	Ala Ser Val Thr Thr Asn
	215	220 225
Lys Thr Val His	Leu Asn Val Ser Tyr	Pro Pro Gln Asn Leu Thr
	230	235 240
Met Thr Val Phe	Gln Gly Asp Gly Thr	Val Ser Thr Val Leu Gly
	245	250 255
Asn Gly Ser Ser	Leu Ser Leu Pro Glu	Gly Gln Ser Leu Arg Leu
	260	265 270
Val Cys Ala Val	Asp Ala Val Asp Ser	Asn Pro Pro Ala Arg Leu
	275	280 285
Ser Leu Ser Trp	Arg Gly Leu Thr Leu	Cys Pro Ser Gln Pro Ser
	290	295 300
Asn Pro Gly Val	Leu Glu Leu Pro Trp	Val His Leu Arg Asp Ala
	305	310 315
Ala Glu Phe Thr	Cys Arg Ala Gln Asn	Pro Leu Gly Ser Gln Gln
	320	325 330
Val Tyr Leu Asn	Val Ser Leu Gln Ser	Lys Ala Thr Ser Gly Val
	335	340 345
Thr Gln Gly Val	Val Gly Gly Ala Gly	Ala Thr Ala Leu Val Phe
	350	355 360
Leu Ser Phe Cys	Val Ile Phe Val Val	Val Arg Ser Cys Arg Lys
	365	370 375
Lys Ser Ala Arg	Pro Ala Ala Gly Val	Gly Asp Thr Gly Ile Glu
	380	385 390
Asp Ala Asn Ala	Val Arg Gly Ser Ala	Ser Gln Gly Pro Leu Thr
	395	400 405
Glu Pro Trp Ala	Glu Asp Ser Pro Pro	Asp Gln Pro Pro Pro Ala
	410	415 420
Ser Ala Arg Ser	Ser Val Gly Glu Gly	Glu Leu Gln Tyr Ala Ser
	425	430 435
Leu Ser Phe Gln	Met Val Lys Pro Trp	Asp Ser Arg Gly Gln Glu
	440	445 450
Ala Thr Asp Thr	Glu Tyr Ser Glu Ile	Lys Ile His Arg
	455	460

<210> 161
 <211> 739
 <212> DNA
 <213> Homo sapiens

<400> 161
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 accctgttcc tgggtgtcac gctcggcctg gccgctgcc tgctcttcac 100
 cctggaggag gaggatatca cagggacctg gtacgtgaag gccatggtgg 150
 tcgataagga ctttccggag gacaggaggc ccaggaaggt gtccccagt 200
 aaggtgacag ccctgggcgg tgggaagttg gaagccacgt tcaccttcac 250
 gagggaggat cgggtgcatcc agaagaaaat cctgatgcgg aagacggagg 300
 agcctggcaa atacagcgcc tatgggggca ggaagctcat gtacctgcag 350
 gagctgcca ggagggacca ctacatcttt tactgcaaag accagcacca 400
 tgggggcctg ctccacatgg gaaagcttgt gggtaggaat totgatacca 450
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 aactaggca gccccgggt ctgcacctcc agagcccacc ctaccaccag 600
 acacagagcc cggaccacct ggacctacc tccagccatg acccttcct 650
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 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 739

<210> 162
 <211> 170
 <212> PRT
 <213> Homo sapiens

<400> 162
 Met Lys Thr Leu Phe Leu Gly Val Thr Leu Gly Leu Ala Ala Ala
 1 5 10 15
 Leu Ser Phe Thr Leu Glu Glu Glu Asp Ile Thr Gly Thr Trp Tyr
 20 25 30
 Val Lys Ala Met Val Val Asp Lys Asp Phe Pro Glu Asp Arg Arg
 35 40 45
 Pro Arg Lys Val Ser Pro Val Lys Val Thr Ala Leu Gly Gly Gly
 50 55 60
 Lys Leu Glu Ala Thr Phe Thr Phe Met Arg Glu Asp Arg Cys Ile
 65 70 75

Gln Lys Lys Ile Leu Met Arg Lys Thr Glu Glu Pro Gly Lys Tyr
80 85 90

Ser Ala Tyr Gly Gly Arg Lys Leu Met Tyr Leu Gln Glu Leu Pro
95 100 105

Arg Arg Asp His Tyr Ile Phe Tyr Cys Lys Asp Gln His His Gly
110 115 120

Gly Leu Leu His Met Gly Lys Leu Val Gly Arg Asn Ser Asp Thr
125 130 135

Asn Arg Glu Ala Leu Glu Glu Phe Lys Lys Leu Val Gln Arg Lys
140 145 150

Gly Leu Ser Glu Glu Asp Ile Phe Thr Pro Leu Gln Thr Gly Ser
155 160 165

Cys Val Pro Glu His
170

<210> 163
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 163
ggagatgaag accctgttcc tg 22

<210> 164
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 164
ggagatgaag accctgttcc tgggtg 26

<210> 165
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 165
gtcctccgga aagtccttat c 21

<210> 166
<211> 25

<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 166
gcctagtgtt cggaacgca gcttc 25

<210> 167
<211> 50
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 167
caggacctg gtacgtgaag gccatggtgg tcgataagga cttccggag 50

<210> 168
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 168
ctgtccttca ccctggagga ggaggatatt acaggacct ggtac 45

<210> 169
<211> 1204
<212> DNA
<213> Homo sapiens

<400> 169
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aggccatgag gattctgcag ttaatcctgc ttgctctggc aacagggtt 150
gtagggggag agaccaggat catcaagggg ttcgagtgc agcctcactc 200
ccagccctgg caggcagccc tgttcgagaa gacgcggcta ctctgtggg 250
cgacgtcat cggccccaga tggctcctga cagcagcca ctgcctcaag 300
ccccgtaca tagttcacct ggggcagcac aacctccaga aggaggagg 350
ctgtgagcag acccgacag cactgagtc cttccccac cccggttca 400
acaacagcct cccaacaaa gaccaccgca atgacatcat gctggtgaag 450
atggcatcgc cagtctccat cacctgggct gtgcgacccc tcacctctc 500

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ctcacgctgt gtcactgctg gcaccagctg cctcatttcc ggctgggggca 550
gcacgtccag cccccagtta cgctgcttc acaccttgcg atgcgccaac 600
atcaccatca ttgagcacca gaagtgtgag aacgcctacc ccggcaacat 650
cacagacacc atggtgtgtg ccagcgtgca ggaagggggc aaggactcct 700
gccaggggtga ctccgggggc cctctggtct gtaaccagtc tcttcaaggc 750
attatctcct gggggccagga tccgtgtgcg atcacccgaa agcctggtgt 800
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acaattagac tggaccacc caccacagcc catcacctc catttccact 900
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ccttgaaata ttgtgactct gggaatgaca acacctggtt tgttctctgt 1100
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aaaa 1204
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<210> 170
<211> 250
<212> PRT
<213> Homo sapiens
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<400> 170														
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				20					25					30
His	Ser	Gln	Pro	Trp	Gln	Ala	Ala	Leu	Phe	Glu	Lys	Thr	Arg	Leu
				35					40					45
Leu	Cys	Gly	Ala	Thr	Leu	Ile	Ala	Pro	Arg	Trp	Leu	Leu	Thr	Ala
				50					55					60
Ala	His	Cys	Leu	Lys	Pro	Arg	Tyr	Ile	Val	His	Leu	Gly	Gln	His
				65					70					75
Asn	Leu	Gln	Lys	Glu	Glu	Gly	Cys	Glu	Gln	Thr	Arg	Thr	Ala	Thr
				80					85					90
Glu	Ser	Phe	Pro	His	Pro	Gly	Phe	Asn	Asn	Ser	Leu	Pro	Asn	Lys
				95					100					105

Asp	His	Arg	Asn	Asp	Ile	Met	Leu	Val	Lys	Met	Ala	Ser	Pro	Val	
			110						115					120	
Ser	Ile	Thr	Trp	Ala	Val	Arg	Pro	Leu	Thr	Leu	Ser	Ser	Arg	Cys	
			125						130					135	
Val	Thr	Ala	Gly	Thr	Ser	Cys	Leu	Ile	Ser	Gly	Trp	Gly	Ser	Thr	
			140						145					150	
Ser	Ser	Pro	Gln	Leu	Arg	Leu	Pro	His	Thr	Leu	Arg	Cys	Ala	Asn	
			155						160					165	
Ile	Thr	Ile	Ile	Glu	His	Gln	Lys	Cys	Glu	Asn	Ala	Tyr	Pro	Gly	
			170						175					180	
Asn	Ile	Thr	Asp	Thr	Met	Val	Cys	Ala	Ser	Val	Gln	Glu	Gly	Gly	
			185						190					195	
Lys	Asp	Ser	Cys	Gln	Gly	Asp	Ser	Gly	Gly	Pro	Leu	Val	Cys	Asn	
			200						205					210	
Gln	Ser	Leu	Gln	Gly	Ile	Ile	Ser	Trp	Gly	Gln	Asp	Pro	Cys	Ala	
			215						220					225	
Ile	Thr	Arg	Lys	Pro	Gly	Val	Tyr	Thr	Lys	Val	Cys	Lys	Tyr	Val	
			230						235					240	
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			245						250						

<210> 171
 <211> 25
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 171
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<210> 172
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 172
 ctccaggcca tgaggattct gcag 24

<210> 173
 <211> 18
 <212> DNA
 <213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 173
cctctggtct gtaaccag 18

<210> 174
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 174
tctgtgatgt tgccggggta ggcg 24

<210> 175
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 175
cgtgtagaca ccaggctttc gggcg 25

<210> 176
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 176
cccttgatga tcctgggc 18

<210> 177
<211> 50
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 177
aggccatgag gattctgcag ttaatcctgc ttgctctggc aacagggctt 50

<210> 178
<211> 43
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 178
gagagaccag gatcatcaag gggttcgagt gcaagcctca ctc 43

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<210> 179
<211> 907
<212> DNA
<213> Homo sapiens
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<400> 179
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<212> PRT
<213> Homo sapiens
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 20 25 30
 Ser Thr Glu Glu Val Lys Ile Glu Val Leu His Arg Pro Glu Asn
 35 40 45
 Cys Ser Lys Thr Ser Lys Lys Gly Asp Leu Leu Asn Ala His Tyr
 50 55 60
 Asp Gly Tyr Leu Ala Lys Asp Gly Ser Lys Phe Tyr Cys Ser Arg
 65 70 75
 Thr Gln Asn Glu Gly His Pro Lys Trp Phe Val Leu Gly Val Gly
 80 85 90
 Gln Val Ile Lys Gly Leu Asp Ile Ala Met Thr Asp Met Cys Pro
 95 100 105
 Gly Glu Lys Arg Lys Val Val Ile Pro Pro Ser Phe Ala Tyr Gly
 110 115 120
 Lys Glu Gly Tyr Ala Glu Gly Lys Ile Pro Pro Asp Ala Thr Leu
 125 130 135
 Ile Phe Glu Ile Glu Leu Tyr Ala Val Thr Lys Gly Pro Arg Ser
 140 145 150
 Ile Glu Thr Phe Lys Gln Ile Asp Met Asp Asn Asp Arg Gln Leu
 155 160 165
 Ser Lys Ala Glu Ile Asn Leu Tyr Leu Gln Arg Glu Phe Glu Lys
 170 175 180
 Asp Glu Lys Pro Arg Asp Lys Ser Tyr Gln Asp Ala Val Leu Glu
 185 190 195
 Asp Ile Phe Lys Lys Asn Asp His Asp Gly Asp Gly Phe Ile Ser
 200 205 210
 Pro Lys Glu Tyr Asn Val Tyr Gln His Asp Glu Leu
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<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 181

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<210> 182

<211> 18

<212> DNA

<213> Artificial Sequence

<220>
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gacatggaca atgacagg 18

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<220>
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<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 184
gatgtctgcc accccaag 18

<210> 185
<211> 27
<212> DNA
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<220>
<223> Synthetic oligonucleotide probe

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<210> 186
<211> 24
<212> DNA
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<223> Synthetic oligonucleotide probe

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<210> 187
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<223> Synthetic oligonucleotide probe

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cc 52

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<212> DNA

<213> Homo sapiens

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cccaaagtct tctgtgtca ataactca ctgcacctgc aaccatggat 150

atacttctgg atctgggcag aaactattca cattccccctt ggagacatgt 200

aacgccaggc atggtggctc ggcctgttaa tcccagttct ttgggaagcc 250

aaggcaggtg gatcacctga ggtcaggagt ttgagaccag cctggccaac 300

atagtgaac cccgtgtcta ctaaaaatac aaaaatcagc cgggcgtggt 350

ggtgcatgcc tgcaatccca gttactcggg aggctgaggc aggagaatcg 400

cttgaactca ggaggcagaa gttgcagtga acccagatcc tgccattgca 450

ctccagcatg gatgacagag caagactccg tctcaaaaag aaaagatagt 500

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ccaaataaag tacttatatt etc 573

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<211> 74

<212> PRT

<213> Homo sapiens

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20 25 30

Cys Pro Pro Asn Ala Ser Cys Val Asn Asn Thr His Cys Thr Cys
35 40 45

Asn His Gly Tyr Thr Ser Gly Ser Gly Gln Lys Leu Phe Thr Phe
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Pro Leu Glu Thr Cys Asn Ala Arg His Gly Gly Ser Arg Leu
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 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

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<210> 191
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 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

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 <212> DNA
 <213> Homo sapiens

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 gttcttgggc tcagccaggc agccacaccg aagattttca atggcactga 200
 gtgtgggcgt aactcacagc cgtggcaggt ggggctgttt gagggcacca 250
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 gctcactgca gcggcagcag gtactgggtg cgctggggg aacacagcct 350
 cagccagctc gactggaccg agcagatccg gcacagcggc ttctctgtga 400
 cccatccccg ctacctggga gcctcgacga gccacgagca cgacctccgg 450

Thr Ser Ser Val Gln Pro Leu Pro Leu Pro Asn Asp Cys Ala Thr
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Ala Gly Thr Glu Cys His Val Ser Gly Trp Gly Ile Thr Asn His
140 145 150

Pro Arg Asn Pro Phe Pro Asp Leu Leu Gln Cys Leu Asn Leu Ser
155 160 165

Ile Val Ser His Ala Thr Cys His Gly Val Tyr Pro Gly Arg Ile
170 175 180

Thr Ser Asn Met Val Cys Ala Gly Gly Val Pro Gly Gln Asp Ala
185 190 195

Cys Gln Gly Asp Ser Gly Gly Pro Leu Val Cys Gly Gly Val Leu
200 205 210

Gln Gly Leu Val Ser Trp Gly Ser Val Gly Pro Cys Gly Gln Asp
215 220 225

Gly Ile Pro Gly Val Tyr Thr Tyr Ile Cys Lys Tyr Val Asp Trp
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Ile Arg Met Ile Met Arg Asn Asn
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ggcttgctca aagcccggca ggagaggagg ctggccgaga tcaaccggga 200
gtttctgtgt gaccagaagt acagtgatga agagaacctt ccagaaaagc 250
tcacagcctt caaagagaag tacatggagt ttgacctgaa caatgaaggc 300
gagattgacc tgatgtcttt aaagaggatg atggagaagc ttggtgtccc 350
caagaccac ctggagatga agaagatgat ctgagagggtg acaggagggg 400
tcagtgcac tatatcctac cgagactttg tgaacatgat gctggggaaa 450
cggtcggctg tctcaagtt agtcatgatg tttgaaggaa aagccaacga 500
gagcagcccc aagccagttg gccccctcc agagagagac attgctagcc 550
tgccctgagg accccgctg gactccccag ccttcccacc ccatacctcc 600

ctcccgatct	tgctgccctt	cttgacacac	tgtgatctct	ctctctctca	650
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<210> 196
<211> 150
<212> PRT
<213> Homo sapiens
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          20          25          30

Arg Glu Phe Leu Cys Asp Gln Lys Tyr Ser Asp Glu Glu Asn Leu
          35          40          45

Pro Glu Lys Leu Thr Ala Phe Lys Glu Lys Tyr Met Glu Phe Asp
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Leu Asn Asn Glu Gly Glu Ile Asp Leu Met Ser Leu Lys Arg Met
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[illegible]

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<212> DNA
<213> Homo sapiens
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<212> PRT
<213> Homo sapiens
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              20              25              30

Ala  Val  Ala  Cys  Pro  Thr  Lys  Cys  Thr  Cys  Ser  Ala  Ala  Ser  Val

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Arg	Asn	Ala	Glu	Arg	Leu	Asp	Leu	Asp	Arg	Asn	Asn	Ile	Thr	Arg					
				65							70					75			
Ile	Thr	Lys	Met	Asp	Phe	Ala	Gly	Leu	Lys	Asn	Leu	Arg	Val	Leu					
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His	Leu	Glu	Asp	Asn	Gln	Val	Ser	Val	Ile	Glu	Arg	Gly	Ala	Phe					
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Gln	Asp	Leu	Lys	Gln	Leu	Glu	Arg	Leu	Arg	Leu	Asn	Lys	Asn	Lys					
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Leu	Cys	Met	Ala	Pro	Val	His	Leu	Arg	Gly	Phe	Asn	Val	Ala	Asp					
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Val	Gln	Lys	Lys	Glu	Tyr	Val	Cys	Pro	Ala	Pro	His	Ser	Glu	Pro					
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Pro	Ser	Cys	Asn	Ala	Asn	Ser	Ile	Ser	Cys	Pro	Ser	Pro	Cys	Thr					
				275							280					285			
Cys	Ser	Asn	Asn	Ile	Val	Asp	Cys	Arg	Gly	Lys	Gly	Leu	Met	Glu					
				290							295					300			
Ile	Pro	Ala	Asn	Leu	Pro	Glu	Gly	Ile	Val	Glu	Ile	Arg	Leu	Glu					
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Gln	Asn	Ser	Ile	Lys	Ala	Ile	Pro	Ala	Gly	Ala	Phe	Thr	Gln	Tyr					

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				890					895					900
His	Arg	Phe	Gln	Cys 905	Lys	Gly	Pro	Val	Asp 910	Ile	Asn	Ile	Val	Ala 915
Lys	Cys	Asn	Ala	Cys 920	Leu	Ser	Ser	Pro	Cys 925	Lys	Asn	Asn	Gly	Thr 930
Cys	Thr	Gln	Asp	Pro 935	Val	Glu	Leu	Tyr	Arg 940	Cys	Ala	Cys	Pro	Tyr 945
Ser	Tyr	Lys	Gly	Lys 950	Asp	Cys	Thr	Val	Pro 955	Ile	Asn	Thr	Cys	Ile 960
Gln	Asn	Pro	Cys	Gln 965	His	Gly	Gly	Thr	Cys 970	His	Leu	Ser	Asp	Ser 975
His	Lys	Asp	Gly	Phe 980	Ser	Cys	Ser	Cys	Pro 985	Leu	Gly	Phe	Glu	Gly 990
Gln	Arg	Cys	Glu	Ile 995	Asn	Pro	Asp	Asp	Cys 1000	Glu	Asp	Asn	Asp	Cys 1005
Glu	Asn	Asn	Ala	Thr 1010	Cys	Val	Asp	Gly	Ile 1015	Asn	Asn	Tyr	Val	Cys 1020
Ile	Cys	Pro	Pro	Asn 1025	Tyr	Thr	Gly	Glu	Leu 1030	Cys	Asp	Glu	Val	Ile 1035
Asp	His	Cys	Val	Pro 1040	Glu	Leu	Asn	Leu	Cys 1045	Gln	His	Glu	Ala	Lys 1050
Cys	Ile	Pro	Leu	Asp 1055	Lys	Gly	Phe	Ser	Cys 1060	Glu	Cys	Val	Pro	Gly 1065
Tyr	Ser	Gly	Lys	Leu 1070	Cys	Glu	Thr	Asp	Asn 1075	Asp	Asp	Cys	Val	Ala 1080
His	Lys	Cys	Arg	His 1085	Gly	Ala	Gln	Cys	Val 1090	Asp	Thr	Ile	Asn	Gly 1095
Tyr	Thr	Cys	Thr	Cys 1100	Pro	Gln	Gly	Phe	Ser 1105	Gly	Pro	Phe	Cys	Glu 1110
His	Pro	Pro	Pro	Met 1115	Val	Leu	Leu	Gln	Thr 1120	Ser	Pro	Cys	Asp	Gln 1125
Tyr	Glu	Cys	Gln	Asn 1130	Gly	Ala	Gln	Cys	Ile 1135	Val	Val	Gln	Gln	Glu 1140
Pro	Thr	Cys	Arg	Cys 1145	Pro	Pro	Gly	Phe	Ala 1150	Gly	Pro	Arg	Cys	Glu 1155
Lys	Leu	Ile	Thr	Val 1160	Asn	Phe	Val	Gly	Lys 1165	Asp	Ser	Tyr	Val	Glu 1170
Leu	Ala	Ser	Ala	Lys	Val	Arg	Pro	Gln	Ala	Asn	Ile	Ser	Leu	Gln

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Val	Tyr	Asp	Ser	Leu	Ser	Ser	Pro	Pro	Thr	Thr	Val	Tyr	Ser	Val	
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Leu	Arg	Gln	Gly	Thr	Asp	Arg	Pro	Leu	Gly	Gly	Phe	His	Gly	Cys	
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Ile	His	Glu	Val	Arg	Ile	Asn	Asn	Glu	Leu	Gln	Asp	Phe	Lys	Ala	
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Thr	Val	Cys	Lys	His	Gly	Leu	Cys	Arg	Ser	Val	Glu	Lys	Asp	Ser	
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Val	Val	Cys	Glu	Cys	Arg	Pro	Gly	Trp	Thr	Gly	Pro	Leu	Cys	Asp	
				1355					1360					1365	
Gln	Glu	Ala	Arg	Asp	Pro	Cys	Leu	Gly	His	Arg	Cys	His	His	Gly	
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Lys	Cys	Val	Ala	Thr	Gly	Thr	Ser	Tyr	Met	Cys	Lys	Cys	Ala	Glu	
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Gly	Tyr	Gly	Gly	Asp	Leu	Cys	Asp	Asn	Lys	Asn	Asp	Ser	Ala	Asn	
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Ala	Cys	Ser	Ala	Phe	Lys	Cys	His	His	Gly	Gln	Cys	His	Ile	Ser	
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Asp	Gln	Gly	Glu	Pro	Tyr	Cys	Leu	Cys	Gln	Pro	Gly	Phe	Ser	Gly	
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Glu	His	Cys	Gln	Gln	Glu	Asn	Pro	Cys	Leu	Gly	Gln	Val	Val	Arg	
				1445					1450					1455	
Glu	Val	Ile	Arg	Arg	Gln	Lys	Gly	Tyr	Ala	Ser	Cys	Ala	Thr	Ala	

1460 1465 1470
 Ser Lys Val Pro Ile Met Glu Cys Arg Gly Gly Cys Gly Pro Gln
 1475 1480 1485
 Cys Cys Gln Pro Thr Arg Ser Lys Arg Arg Lys Tyr Val Phe Gln
 1490 1495 1500
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 Glu Cys Gly Cys Leu Ala Cys Ser
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 <213> Artificial Sequence

<220>
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 <211> 753
 <212> DNA
 <213> Homo sapiens

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gaatctgcct tttcagttct gtctccggca ggctttgagg atgaaggctg 150
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caattactgg ggcttcagcc ttggaaaactg gatctgcatg gcatattatg 300
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atgacctcac agatgcaatt atctgtgccg ggaaaattgt taaagagaca 500
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cctgtccgag tggaaaaaag gctgtgaggt ttcttaaact ggaactggac 600
ccaggatgct ttgcagcaac gccctaggat ttgcagtga tgtccaaatg 650
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qtc 753

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<213> Artificial Sequence

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<223> Synthetic oligonucleotide probe

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<210> 206

<211> 24

<212> DNA

<213> Artificial Sequence

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<223> Synthetic oligonucleotide probe

<400> 206

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<212> DNA

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<223> Synthetic oligonucleotide probe

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<210> 208

<211> 47

<212> DNA

<213> Artificial Sequence

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<223> Synthetic oligonucleotide probe

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<210> 209

<211> 1648

<212> DNA

<213> Homo sapiens

<400> 209

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ctttttacct tgggtgtctgc ctgtatccca gtgttcaggc tggctagacg 200
gcggaagaag atcctatctt actgtcactt ccagatctg cttctcacca 250
agagagattc ttttcttaaa cgactataca gggccccaat tgactggata 300
gaggaatata ccacaggcat ggcagactgc atcttagtca acagccagtt 350
cacagctgct gtttttaagg aaacattcaa gtccctgtct cacatagacc 400
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cacagctgca cgtgtgtgct ttacacacca agcaatgagc actttggcat 800
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ttatggattg tagaccagc tttgaaacca aaaaagaaac ctagaatcta 1150

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Trp Glu Arg Val His Leu Ile Val Ala Gly Gly Tyr Asp Glu Arg	170		175		180
Val Leu Glu Asn Val Glu His Tyr Gln Glu Leu Lys Lys Met Val	185		190		195
Gln Gln Ser Asp Leu Gly Gln Tyr Val Thr Phe Leu Arg Ser Phe	200		205		210
Ser Asp Lys Gln Lys Ile Ser Leu Leu His Ser Cys Thr Cys Val	215		220		225
Leu Tyr Thr Pro Ser Asn Glu His Phe Gly Ile Val Pro Leu Glu	230		235		240
Ala Met Tyr Met Gln Cys Pro Val Ile Ala Val Asn Ser Gly Gly	245		250		255
Pro Leu Glu Ser Ile Asp His Ser Val Thr Gly Phe Leu Cys Glu	260		265		270
Pro Asp Pro Val His Phe Ser Glu Ala Ile Glu Lys Phe Ile Arg	275		280		285
Glu Pro Ser Leu Lys Ala Thr Met Gly Leu Ala Gly Arg Ala Arg	290		295		300
Val Lys Glu Lys Phe Ser Pro Glu Ala Phe Thr Glu Gln Leu Tyr	305		310		315
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 <213> Homo sapiens

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 tctacctcta tccggcttcc agacaagctg caggaattcc agggattact 150
 ccaactgaag aaaaagatgg taatcttcca gatattgtga atagtggaag 200
 tttgcatgag ttcttggtta atttgcatga gagatatggg cctgtggtct 250
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 ctgaagcagc atatcaatcc caataagaca tcggaccctt ttgaaaccat 350
 gctgaagtca ttattaaggt atcaatctgg tgggtggcagt gtgagtgaaa 400

11-11-61

Lys Leu Tyr Glu Glu Ile Asn Gln Val Phe Gly Asn Gly Pro Val
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Thr Pro Glu Lys Ile Glu Gln Leu Arg Tyr Cys Gln His Val Leu
320 325 330

Cys Glu Thr Val Arg Thr Ala Lys Leu Thr Pro Val Ser Ala Gln
335 340 345

Leu Gln Asp Ile Glu Gly Lys Ile Asp Arg Phe Ile Ile Pro Arg
350 355 360

Glu Thr Leu Val Leu Tyr Ala Leu Gly Val Val Leu Gln Asp Pro
365 370 375

Asn Thr Trp Pro Ser Pro His Lys Phe Asp Pro Asp Arg Phe Asp
380 385 390

Asp Glu Leu Val Met Lys Thr Phe Ser Ser Leu Gly Phe Ser Gly
395 400 405

Thr Gln Glu Cys Pro Glu Leu Arg Phe Ala Tyr Met Val Thr Thr
410 415 420

Val Leu Leu Ser Val Leu Val Lys Arg Leu His Leu Leu Ser Val
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Arg Glu Glu Ala Trp Ile Thr Val Ser Lys Arg Tyr
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<210> 213
<211> 759
<212> DNA
<213> Homo sapiens

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cgtcatcacc ttattctggt cccgggacag caacatacag gcctgcctgc 200
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<210> 218

<211> 252

<212> PRT

<213> Homo sapiens

<400> 218

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				20					25					30
Glu	Asp	Pro	Glu	Arg	Asp	Asp	His	Glu	Gly	Gln	Pro	Arg	Pro	Arg
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Val	Pro	Arg	Lys	Arg 50	Gly	His	Ile	Ser	Pro 55	Lys	Ser	Arg	Pro	Met 60
Ala	Asn	Ser	Thr	Leu 65	Leu	Gly	Leu	Leu	Ala 70	Pro	Pro	Gly	Glu	Ala 75
Trp	Gly	Ile	Leu	Gly 80	Gln	Pro	Pro	Asn	Arg 85	Pro	Asn	His	Ser	Pro 90
Pro	Pro	Ser	Ala	Lys 95	Val	Lys	Lys	Ile	Phe 100	Gly	Trp	Gly	Asp	Phe 105
Tyr	Ser	Asn	Ile	Lys 110	Thr	Val	Ala	Leu	Asn 115	Leu	Leu	Val	Thr	Gly 120
Lys	Ile	Val	Asp	His 125	Gly	Asn	Gly	Thr	Phe 130	Ser	Val	His	Phe	Gln 135
His	Asn	Ala	Thr	Gly 140	Gln	Gly	Asn	Ile	Ser 145	Ile	Ser	Leu	Val	Pro 150
Pro	Ser	Lys	Ala	Val 155	Glu	Phe	His	Gln	Glu 160	Gln	Gln	Ile	Phe	Ile 165
Glu	Ala	Lys	Ala	Ser 170	Lys	Ile	Phe	Asn	Cys 175	Arg	Met	Glu	Trp	Glu 180
Lys	Val	Glu	Arg	Gly 185	Arg	Arg	Thr	Ser	Leu 190	Cys	Thr	His	Asp	Pro 195
Ala	Lys	Ile	Cys	Ser 200	Arg	Asp	His	Ala	Gln 205	Ser	Ser	Ala	Thr	Trp 210
Ser	Cys	Ser	Gln	Pro 215	Phe	Lys	Val	Val	Cys 220	Val	Tyr	Ile	Ala	Phe 225
Tyr	Ser	Thr	Asp	Tyr 230	Arg	Leu	Val	Gln	Lys 235	Val	Cys	Pro	Asp	Tyr 240
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<212> DNA
<213> Homo sapiens
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agctcgaggg gagactttga cttcaagcca cagaattggg ggaagtgtgc 200
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ccgggcgctg	tccgcggtgc	cggccgtgct	gctggtcctc	acgctgccgg	400
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ttcaaataat ccatatctaa atttagtgca atatcttgct ttttgtatag 2000
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tatatgttaa aaaaa 2065

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<211> 201
<212> PRT
<213> Homo sapiens

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Thr Glu Pro Ile Val Leu Glu Gly Lys Cys Leu Val Val Cys Asp
35 40 45
Ser Asn Pro Ala Thr Asp Ser Lys Gly Ser Ser Ser Ser Pro Leu
50 55 60
Gly Ile Ser Val Arg Ala Ala Asn Ser Lys Val Ala Phe Ser Ala
65 70 75
Val Arg Ser Thr Asn His Glu Pro Ser Glu Met Ser Asn Lys Thr
80 85 90
Arg Ile Ile Tyr Phe Asp Gln Ile Leu Val Asn Val Gly Asn Phe
95 100 105
Phe Thr Leu Glu Ser Val Phe Val Ala Pro Arg Lys Gly Ile Tyr
110 115 120
Ser Phe Ser Phe His Val Ile Lys Val Tyr Gln Ser Gln Thr Ile
125 130 135
Gln Val Asn Leu Met Leu Asn Gly Lys Pro Val Ile Ser Ala Phe
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Ala Gly Asp Lys Asp Val Thr Arg Glu Ala Ala Thr Asn Gly Val
155 160 165

Leu Leu Tyr Leu Asp Lys Glu Asp Lys Val Tyr Leu Lys Leu Glu
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<212> DNA
<213> Homo sapiens
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tttcgtccct tgtttggttc atggcaagag tcattattga caacaaagat 200
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Pro Gly Glu Thr	Ala Pro Ser Met Arg	Leu Leu Ala Tyr Val	Ser
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Gly Leu Gly Phe	Gly Ile Met Ser Gly	Val Phe Ser Phe Val	Asn
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Thr Leu Ser Asp	Ser Leu Gly Pro Gly	Thr Val Gly Ile His	Gly
	140	145	150
Asp Ser Pro Gln	Phe Phe Leu Tyr Ser	Ala Phe Met Thr Leu	Val
	155	160	165
Ile Ile Leu Leu	His Val Phe Trp Gly	Ile Val Phe Phe Asp	Gly
	170	175	180
Cys Glu Lys Lys	Lys Trp Gly Ile Leu	Leu Ile Val Leu Leu	Thr
	185	190	195
His Leu Leu Val	Ser Ala Gln Thr Phe	Ile Ser Ser Tyr Tyr	Gly
	200	205	210
Ile Asn Leu Ala	Ser Ala Phe Ile Ile	Leu Val Leu Met Gly	Thr
	215	220	225
Trp Ala Phe Leu	Ala Ala Gly Gly Ser	Cys Arg Ser Leu Lys	Leu
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Cys Leu Leu Cys	Gln Asp Lys Asn Phe	Leu Leu Tyr Asn Gln	Arg
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Ser Arg

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 <211> 3939
 <212> DNA
 <213> Homo sapiens

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Met Asp Asp Phe	Val Leu Arg Thr Gly	Glu Gln Phe Ser Phe Asn			
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Thr Thr Ala Ala	Gln Pro Gln Tyr Phe	Lys Tyr Glu Phe Pro Glu			
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Gly Val Asp Ser	Val Ile Val Lys Val	Thr Ser Asn Lys Ala Phe			
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Pro Cys Ser Val	Ile Ser Ile Gln Asp	Val Leu Cys Pro Val Tyr			
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Asp Leu Asp Asn	Asn Val Ala Phe Ile	Gly Met Tyr Gln Thr Met			
	215	220			225
Thr Lys Lys Ala	Ala Ile Thr Val Gln	Arg Lys Asp Phe Pro Ser			
	230	235			240
Asn Ser Phe Tyr	Val Val Val Val Val	Lys Thr Glu Asp Gln Ala			
	245	250			255
Cys Gly Gly Ser	Leu Pro Phe Tyr Pro	Phe Ala Glu Asp Glu Pro			
	260	265			270
Val Asp Gln Gly	His Arg Gln Lys Thr	Leu Ser Val Leu Val Ser			
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Gln Ala Val Thr	Ser Glu Ala Tyr Val	Ser Gly Met Leu Phe Cys			
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Leu Gly Ile Phe	Leu Ser Phe Tyr Leu	Leu Thr Val Leu Leu Ala			
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Cys Trp Glu Asn	Trp Arg Gln Lys Lys	Lys Thr Leu Leu Val Ala			
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Ile Asp Arg Ala	Cys Pro Glu Ser Gly	His Pro Arg Val Leu Ala			
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Asp Ser Phe Pro	Gly Ser Ser Pro Tyr	Glu Gly Tyr Asn Tyr Gly			
	350	355			360
Ser Phe Glu Asn	Val Ser Gly Ser Thr	Asp Gly Leu Val Asp Ser			
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Ala Gly Thr Gly	Asp Leu Ser Tyr Gly	Tyr Gln Gly Arg Ser Phe			
	380	385			390
Glu Pro Val Gly	Thr Arg Pro Arg Val	Asp Ser Met Ser Ser Val			
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Glu Glu Asp Asp	Tyr Asp Thr Leu Thr	Asp Ile Asp Ser Asp Lys			

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Gln	Asp	Ile	Cys	Tyr 485	Tyr	Asn	Phe	Leu	Cys 490	Ala	His	Pro	Leu	Gly 495	
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Thr	Ala	Phe	Trp	Ile 635	Val	Phe	Ser	Ile	Ile 640	His	Ile	Ile	Ala	Thr 645	
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Asp	Ser	Gly	Ile	Phe 665	Arg	Arg	Ile	Leu	His 670	Val	Leu	Tyr	Thr	Asp 675	
Cys	Ile	Arg	Gln	Cys 680	Ser	Gly	Pro	Leu	Tyr 685	Val	Asp	Arg	Met	Val 690	
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[illegible]

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Met	Lys	Leu	Arg	Ser 740	Gly	Glu	Arg	Ile	Lys 745	Leu	Ile	Pro	Leu	Leu 750	
Cys	Ile	Val	Cys	Thr 755	Ser	Val	Val	Trp	Gly 760	Phe	Ala	Leu	Phe	Phe 765	
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Arg	Glu	His	Asn	Arg 785	Asp	Cys	Ile	Leu	Leu 790	Asp	Phe	Phe	Asp	Asp 795	
His	Asp	Ile	Trp	His 800	Phe	Leu	Ser	Ser	Ile 805	Ala	Met	Phe	Gly	Ser 810	
Phe	Leu	Val	Leu	Leu 815	Thr	Leu	Asp	Asp	Asp 820	Leu	Asp	Thr	Val	Gln 825	
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<212> DNA
<213> Homo sapiens
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35 40 45
Leu Pro Arg Glu Gly Ala Glu Gly Gln Ile Val Leu Ser Gly Asp
50 55 60
Ser Gly Lys Ala Thr Glu Gly Pro Phe Ala Met Asp Pro Asp Ser
65 70 75
Gly Phe Leu Leu Val Thr Arg Ala Leu Asp Arg Glu Glu Gln Ala

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Asp	Gln	Val	Pro	His 125	Phe	Ser	Gln	Ala	Ile 130	Tyr	Arg	Ala	Arg	Leu 135
Ser	Arg	Gly	Thr	Arg 140	Pro	Gly	Ile	Pro	Phe 145	Leu	Phe	Leu	Glu	Ala 150
Ser	Asp	Arg	Asp	Glu 155	Pro	Gly	Thr	Ala	Asn 160	Ser	Asp	Leu	Arg	Phe 165
His	Ile	Leu	Ser	Gln 170	Ala	Pro	Ala	Gln	Pro 175	Ser	Pro	Asp	Met	Phe 180
Gln	Leu	Glu	Pro	Arg 185	Leu	Gly	Ala	Leu	Ala 190	Leu	Ser	Pro	Lys	Gly 195
Ser	Thr	Ser	Leu	Asp 200	His	Ala	Leu	Glu	Arg 205	Thr	Tyr	Gln	Leu	Leu 210
Val	Gln	Val	Lys	Asp 215	Met	Gly	Asp	Gln	Ala 220	Ser	Gly	His	Gln	Ala 225
Thr	Ala	Thr	Val	Glu 230	Val	Ser	Ile	Ile	Glu 235	Ser	Thr	Trp	Val	Ser 240
Leu	Glu	Pro	Ile	His 245	Leu	Ala	Glu	Asn	Leu 250	Lys	Val	Leu	Tyr	Pro 255
His	His	Met	Ala	Gln 260	Val	His	Trp	Ser	Gly 265	Gly	Asp	Val	His	Tyr 270
His	Leu	Glu	Ser	His 275	Pro	Pro	Gly	Pro	Phe 280	Glu	Val	Asn	Ala	Glu 285
Gly	Asn	Leu	Tyr	Val 290	Thr	Arg	Glu	Leu	Asp 295	Arg	Glu	Ala	Gln	Ala 300
Glu	Tyr	Leu	Leu	Gln 305	Val	Arg	Ala	Gln	Asn 310	Ser	His	Gly	Glu	Asp 315
Tyr	Ala	Ala	Pro	Leu 320	Glu	Leu	His	Val	Leu 325	Val	Met	Asp	Glu	Asn 330
Asp	Asn	Val	Pro	Ile 335	Cys	Pro	Pro	Arg	Asp 340	Pro	Thr	Val	Ser	Ile 345
Pro	Glu	Leu	Ser	Pro 350	Pro	Gly	Thr	Glu	Val 355	Thr	Arg	Leu	Ser	Ala 360
Glu	Asp	Ala	Asp	Ala	Pro	Gly	Ser	Pro	Asn	Ser	His	Val	Val	Tyr

365										370					375				
Gln	Leu	Leu	Ser	Pro	Glu	Pro	Glu	Asp	Gly	Val	Glu	Gly	Arg	Ala					
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Phe	Gln	Val	Asp	Pro	Thr	Ser	Gly	Ser	Val	Thr	Leu	Gly	Val	Leu					
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Pro	Leu	Arg	Ala	Gly	Gln	Asn	Ile	Leu	Leu	Leu	Val	Leu	Ala	Met					
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Asp	Leu	Ala	Gly	Ala	Glu	Gly	Gly	Phe	Ser	Ser	Thr	Cys	Glu	Val					
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Glu	Val	Ala	Val	Thr	Asp	Ile	Asn	Asp	His	Ala	Pro	Glu	Phe	Ile					
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Thr	Ser	Gln	Ile	Gly	Pro	Ile	Ser	Leu	Pro	Glu	Asp	Val	Glu	Pro					
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Gly	Thr	Leu	Val	Ala	Met	Leu	Thr	Ala	Ile	Asp	Ala	Asp	Leu	Glu					
				470					475					480					
Pro	Ala	Phe	Arg	Leu	Met	Asp	Phe	Ala	Ile	Glu	Arg	Gly	Asp	Thr					
				485					490					495					
Glu	Gly	Thr	Phe	Gly	Leu	Asp	Trp	Glu	Pro	Asp	Ser	Gly	His	Val					
				500					505					510					
Arg	Leu	Arg	Leu	Cys	Lys	Asn	Leu	Ser	Tyr	Glu	Ala	Ala	Pro	Ser					
				515					520					525					
His	Glu	Val	Val	Val	Val	Gln	Ser	Val	Val	Ala	Lys	Leu	Val	Gly					
				530					535					540					
Pro	Gly	Pro	Gly	Pro	Gly	Ala	Thr	Ala	Thr	Val	Thr	Val	Leu	Val					
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Glu	Arg	Val	Met	Pro	Pro	Pro	Lys	Leu	Asp	Gln	Glu	Ser	Tyr	Glu					
				560					565					570					
Ala	Ser	Val	Pro	Ile	Ser	Ala	Pro	Ala	Gly	Ser	Phe	Leu	Leu	Thr					
				575					580					585					
Ile	Gln	Pro	Ser	Asp	Pro	Ile	Ser	Arg	Thr	Leu	Arg	Phe	Ser	Leu					
				590					595					600					
Val	Asn	Asp	Ser	Glu	Gly	Trp	Leu	Cys	Ile	Glu	Lys	Phe	Ser	Gly					
				605					610					615					
Glu	Val	His	Thr	Ala	Gln	Ser	Leu	Gln	Gly	Ala	Gln	Pro	Gly	Asp					
				620					625					630					
Thr	Tyr	Thr	Val	Leu	Val	Glu	Ala	Gln	Asp	Thr	Ala	Leu	Thr	Leu					
				635					640					645					
Ala	Pro	Val	Pro	Ser	Gln	Tyr	Leu	Cys	Thr	Pro	Arg	Gln	Asp	His					

	650	655	660
Gly Leu Ile Val	Ser Gly Pro Ser Lys	Asp Pro Asp Leu Ala	Ser
	665	670	675
Gly His Gly Pro	Tyr Ser Phe Thr Leu	Gly Pro Asn Pro Thr	Val
	680	685	690
Gln Arg Asp Trp	Arg Leu Gln Thr Leu	Asn Gly Ser His Ala	Tyr
	695	700	705
Leu Thr Leu Ala	Leu His Trp Val Glu	Pro Arg Glu His Ile	Ile
	710	715	720
Pro Val Val Val	Ser His Asn Ala Gln	Met Trp Gln Leu Leu	Val
	725	730	735
Arg Val Ile Val	Cys Arg Cys Asn Val	Glu Gly Gln Cys Met	Arg
	740	745	750
Lys Val Gly Arg	Met Lys Gly Met Pro	Thr Lys Leu Ser Ala	Val
	755	760	765
Gly Ile Leu Val	Gly Thr Leu Val Ala	Ile Gly Ile Phe Leu	Ile
	770	775	780
Leu Ile Phe Thr	His Trp Thr Met Ser	Arg Lys Lys Asp Pro	Asp
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Gln Pro Ala Asp	Ser Val Pro Leu Lys	Ala Thr Val	
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<210> 230
 <211> 50
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 230
 cgccttaccg cgcagcccgga agattcacta tgggtgaaaat cgccttcaat 50

<210> 231
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 231
 cctgagctgt aacccctactc cagg 24

<210> 232
 <211> 23
 <212> DNA

(The following information was obtained from the above-mentioned sources.)

 $\langle 220 \rangle$

<223> Synthetic oligonucleotide probe

<400> 232

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<210> 233

<211> 2786

<212> DNA

<213> Homo sapiens

<400> 233

4007-255

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cagaaatgga	gacgagatca	gcaaattgag	tcaactagt	aattcaaaca	150
acttgaagct	caatttctg	aaatctccct	cctccttcaa	tcggcctgtg	200
gatgtcctgg	tcccatctgt	cagtctgcag	gcatttaa	ccttcctgag	250
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 catgtgcggg acaacctota ctaggcgatg gctctgctct gtctacattt 1300
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Arg Lys Ile Val Ser Asp Tyr Gln Arg Asp Pro Ala Ile Thr Ser
200 205 210

Ile Leu Glu Lys Met Asp Ile Phe Leu Leu Pro Val Ala Asn Pro
215 220 225

Asp Gly Tyr Val Tyr Thr Gln Thr Gln Asn Arg Leu Trp Arg Lys
230 235 240

Thr Arg Ser Arg Asn Pro Gly Ser Ser Cys Ile Gly Ala Asp Pro
245 250 255

Asn Arg Asn Trp Asn Ala Ser Phe Ala Gly Lys Gly Ala Ser Asp
260 265 270

Asn Pro Cys Ser Glu Val Tyr His Gly Pro His Ala Asn Ser Glu
275 280 285

Val Glu Val Lys Ser Val Val Asp Phe Ile Gln Lys His Gly Asn
290 295 300

Phe Lys Gly Phe Ile Asp Leu His Ser Tyr Ser Gln Leu Leu Met
305 310 315

Tyr Pro Tyr Gly Tyr Ser Val Lys Lys Ala Pro Asp Ala Glu Glu
320 325 330

Leu Asp Lys Val Ala Arg Leu Ala Ala Lys Ala Leu Ala Ser Val
335 340 345

Ser Gly Thr Glu Tyr Gln Val Gly Pro Thr Cys Thr Thr Val Tyr
350 355 360

Pro Ala Ser Gly Ser Ser Ile Asp Trp Ala Tyr Asp Asn Gly Ile
365 370 375

Lys Phe Ala Phe Thr Phe Glu Leu Arg Asp Thr Gly Thr Tyr Gly
380 385 390

Phe Leu Leu Pro Ala Asn Gln Ile Ile Pro Thr Ala Glu Glu Thr
395 400 405

Trp Leu Gly Leu Lys Thr Ile Met Glu His Val Arg Asp Asn Leu
410 415 420

Tyr

<210> 235
<211> 1743
<212> DNA
<213> Homo sapiens

<400> 235
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gagtcagaac	atctttcttct	cccctgtgag	tgtctccact	tccctggcca	300
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tgaccccagt	ggagctggat	tcgctggcag	ggatgccact	tccaaggctc	1450
aatcaccaaa	ccatcaacag	ggaccccagt	cacaagccaa	cacccattaa	1500

THE UNIVERSITY OF CHICAGO

<210> 237

<211> 23

<212> DNA

<213> Artificial Sequence

 $\langle 220 \rangle$

<223> Synthetic oligonucleotide probe

<400> 237

caaccatgca aggacagggc agg 23

<210> 238

<211> 47

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 238

ctttgctgtt ggcctctgtg ctcccaacca tgcaaggaca gggcagg 47

<210> 239

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 239

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<210> 240

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 240

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<210> 241

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 241

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<210> 242

<211> 2436

<212> DNA

<213> Homo sapiens

<400> 242

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<210> 243
<211> 596
<212> PRT
<213> Homo sapiens

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Ala Asn Thr Gly Ser Ser Val Ile Ser Ser Gly Ala Ser Thr Ala
35 40 45
Thr Asn Ser Gly Ser Ser Val Thr Ser Ser Gly Val Ser Thr Ala
50 55 60
Thr Ile Ser Gly Ser Ser Val Thr Ser Asn Gly Val Ser Ile Val
65 70 75
Thr Asn Ser Glu Phe His Thr Thr Ser Ser Gly Ile Ser Thr Ala
80 85 90
Thr Asn Ser Glu Phe Ser Thr Ala Ser Ser Gly Ile Ser Ile Ala
95 100 105

Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Ala Ser Thr Ala	110	115	120
Thr Asn Ser Glu Ser Ser Thr Pro Ser Ser Gly Ala Ser Thr Val	125	130	135
Thr Asn Ser Gly Ser Ser Val Thr Ser Ser Gly Ala Ser Thr Ala	140	145	150
Thr Asn Ser Glu Ser Ser Thr Val Ser Ser Arg Ala Ser Thr Ala	155	160	165
Thr Asn Ser Glu Ser Ser Thr Leu Ser Ser Gly Ala Ser Thr Ala	170	175	180
Thr Asn Ser Asp Ser Ser Thr Thr Ser Ser Gly Ala Ser Thr Ala	185	190	195
Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Ala Ser Thr Ala	200	205	210
Thr Asn Ser Glu Ser Ser Thr Val Ser Ser Arg Ala Ser Thr Ala	215	220	225
Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Ala Ser Thr Ala	230	235	240
Thr Asn Ser Glu Ser Arg Thr Thr Ser Asn Gly Ala Gly Thr Ala	245	250	255
Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Ala Ser Thr Ala	260	265	270
Thr Asn Ser Asp Ser Ser Thr Val Ser Ser Gly Ala Ser Thr Ala	275	280	285
Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Ala Ser Thr Ala	290	295	300
Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Ala Ser Thr Ala	305	310	315
Thr Asn Ser Asp Ser Ser Thr Thr Ser Ser Gly Ala Gly Thr Ala	320	325	330
Thr Asn Ser Glu Ser Ser Thr Val Ser Ser Gly Ile Ser Thr Val	335	340	345
Thr Asn Ser Glu Ser Ser Thr Pro Ser Ser Gly Ala Asn Thr Ala	350	355	360
Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Ala Asn Thr Ala	365	370	375
Thr Asn Ser Glu Ser Ser Thr Val Ser Ser Gly Ala Ser Thr Ala	380	385	390

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ctgggaagga	agcagagaaa	cttggccaa	gggtcaacca	tgctgctgac	550
caggctggaa	aggaagtgg	gaagcttggc	caaggtgcc	accatgctgc	600
tggccaggcc	gggaaggagc	tgcagaatgc	tcataatggg	gtcaaccaag	650
ccagcaagga	ggccaaccag	ctgctgaatg	gcaaccatca	aagcggatct	700
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agtcaacacg	cctttcatca	accttcccgc	cctgtggagg	agcgtcgcca	800

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 tacacca 957

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<210> 248
<211> 247
<212> PRT
<213> Homo sapiens
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<400> 248

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Leu	Gly	Ala	Leu	Ser	Gly	Trp	Ala	Ala	Ser	Asp	Asp	Pro	Ile	Glu
				20					25					30
Lys	Val	Ile	Glu	Gly	Ile	Asn	Arg	Gly	Leu	Ser	Asn	Ala	Glu	Arg
				35					40					45
Glu	Val	Gly	Lys	Ala	Leu	Asp	Gly	Ile	Asn	Ser	Gly	Ile	Thr	His
				50					55					60
Ala	Gly	Arg	Glu	Val	Glu	Lys	Val	Phe	Asn	Gly	Leu	Ser	Asn	Met
				65					70					75
Gly	Ser	His	Thr	Gly	Lys	Glu	Leu	Asp	Lys	Gly	Val	Gln	Gly	Leu
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Asn	His	Gly	Met	Asp	Lys	Val	Ala	His	Glu	Ile	Asn	His	Gly	Ile
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Gly	Gln	Ala	Gly	Lys	Glu	Ala	Glu	Lys	Leu	Gly	His	Gly	Val	Asn
				110					115					120
Asn	Ala	Ala	Gly	Gln	Ala	Gly	Lys	Glu	Ala	Asp	Lys	Ala	Val	Gln
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Gly	Phe	His	Thr	Gly	Val	His	Gln	Ala	Gly	Lys	Glu	Ala	Glu	Lys
				140					145					150
Leu	Gly	Gln	Gly	Val	Asn	His	Ala	Ala	Asp	Gln	Ala	Gly	Lys	Glu
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Val	Glu	Lys	Leu	Gly	Gln	Gly	Ala	His	His	Ala	Ala	Gly	Gln	Ala
				170					175					180
Gly	Lys	Glu	Leu	Gln	Asn	Ala	His	Asn	Gly	Val	Asn	Gln	Ala	Ser
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Lys	Glu	Ala	Asn	Gln	Leu	Leu	Asn	Gly	Asn	His	Gln	Ser	Gly	Ser
				200					205					210
Ser	Ser	His	Gln	Gly	Gly	Ala	Thr	Thr	Thr	Pro	Leu	Ala	Ser	Gly

215	220	225
Ala Ser Val Asn Thr Pro Phe Ile Asn Leu Pro Ala Leu Trp Arg		
230	235	240
Ser Val Ala Asn Ile Met Pro		
245		

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 <212> DNA
 <213> Artificial Sequence

<220>
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<210> 250
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 250
 aagcttctct gcttcctttc ctgc 24

<210> 251
 <211> 43
 <212> DNA
 <213> Artificial Sequence

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 <223> Synthetic oligonucleotide probe

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<210> 252
 <211> 3781
 <212> DNA
 <213> Homo sapiens

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 tgaccctgac tcaactccagg tccggaggcg ggggcccccg gggcgactcg 150
 ggggaggacc gcggggcgga gctgccgcc gtgagtcagg ccgagccacc 200
 tgagcccgag ccgcgggaca ccgtcgctcc tgctctccga atgctgcgca 250

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tccttggect	gcaccacacc	tacgatgtcc	tcttcctggg	cactggtgac	1650
ggccggctcc	acaaggcagt	gagcgtgggc	ccccgggtgc	acatcattga	1700

(The following information was obtained from the records of the Federal Bureau of Investigation, Department of Justice.)

Ser Phe Lys Gly Lys Asp Pro Gln Arg Asp Cys Gln Asn Tyr Ile	125	130	135
Lys Ile Leu Leu Pro Leu Ser Gly Ser His Leu Phe Thr Cys Gly	140	145	150
Thr Ala Ala Phe Ser Pro Met Cys Thr Tyr Ile Asn Met Glu Asn	155	160	165
Phe Thr Leu Ala Arg Asp Glu Lys Gly Asn Val Leu Leu Glu Asp	170	175	180
Gly Lys Gly Arg Cys Pro Phe Asp Pro Asn Phe Lys Ser Thr Ala	185	190	195
Leu Val Val Asp Gly Glu Leu Tyr Thr Gly Thr Val Ser Ser Phe	200	205	210
Gln Gly Asn Asp Pro Ala Ile Ser Arg Ser Gln Ser Leu Arg Pro	215	220	225
Thr Lys Thr Glu Ser Ser Leu Asn Trp Leu Gln Asp Pro Ala Phe	230	235	240
Val Ala Ser Ala Tyr Ile Pro Glu Ser Leu Gly Ser Leu Gln Gly	245	250	255
Asp Asp Asp Lys Ile Tyr Phe Phe Phe Ser Glu Thr Gly Gln Glu	260	265	270
Phe Glu Phe Phe Glu Asn Thr Ile Val Ser Arg Ile Ala Arg Ile	275	280	285
Cys Lys Gly Asp Glu Gly Gly Glu Arg Val Leu Gln Gln Arg Trp	290	295	300
Thr Ser Phe Leu Lys Ala Gln Leu Leu Cys Ser Arg Pro Asp Asp	305	310	315
Gly Phe Pro Phe Asn Val Leu Gln Asp Val Phe Thr Leu Ser Pro	320	325	330
Ser Pro Gln Asp Trp Arg Asp Thr Leu Phe Tyr Gly Val Phe Thr	335	340	345
Ser Gln Trp His Arg Gly Thr Thr Glu Gly Ser Ala Val Cys Val	350	355	360
Phe Thr Met Lys Asp Val Gln Arg Val Phe Ser Gly Leu Tyr Lys	365	370	375
Glu Val Asn Arg Glu Thr Gln Gln Trp Tyr Thr Val Thr His Pro	380	385	390
Val Pro Thr Pro Arg Pro Gly Ala Cys Ile Thr Asn Ser Ala Arg	395	400	405

Glu Arg Lys Ile Asn Ser Ser Leu Gln	Leu Pro Asp Arg Val Leu
410	415 420
Asn Phe Leu Lys Asp His Phe Leu Met	Asp Gly Gln Val Arg Ser
425	430 435
Arg Met Leu Leu Leu Gln Pro Gln Ala	Arg Tyr Gln Arg Val Ala
440	445 450
Val His Arg Val Pro Gly Leu His His	Thr Tyr Asp Val Leu Phe
455	460 465
Leu Gly Thr Gly Asp Gly Arg Leu His	Lys Ala Val Ser Val Gly
470	475 480
Pro Arg Val His Ile Ile Glu Glu Leu	Gln Ile Phe Ser Ser Gly
485	490 495
Gln Pro Val Gln Asn Leu Leu Leu Asp	Thr His Arg Gly Leu Leu
500	505 510
Tyr Ala Ala Ser His Ser Gly Val Val	Gln Val Pro Met Ala Asn
515	520 525
Cys Ser Leu Tyr Arg Ser Cys Gly Asp	Cys Leu Leu Ala Arg Asp
530	535 540
Pro Tyr Cys Ala Trp Ser Gly Ser Ser	Cys Lys His Val Ser Leu
545	550 555
Tyr Gln Pro Gln Leu Ala Thr Arg Pro	Trp Ile Gln Asp Ile Glu
560	565 570
Gly Ala Ser Ala Lys Asp Leu Cys Ser	Ala Ser Ser Val Val Ser
575	580 585
Pro Ser Phe Val Pro Thr Gly Glu Lys	Pro Cys Glu Gln Val Gln
590	595 600
Phe Gln Pro Asn Thr Val Asn Thr Leu	Ala Cys Pro Leu Leu Ser
605	610 615
Asn Leu Ala Thr Arg Leu Trp Leu Arg	Asn Gly Ala Pro Val Asn
620	625 630
Ala Ser Ala Ser Cys His Val Leu Pro	Thr Gly Asp Leu Leu Leu
635	640 645
Val Gly Thr Gln Gln Leu Gly Glu Phe	Gln Cys Trp Ser Leu Glu
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Glu Gly Phe Gln Gln Leu Val Ala Ser	Tyr Cys Pro Glu Val Val
665	670 675
Glu Asp Gly Val Ala Asp Gln Thr Asp	Glu Gly Gly Ser Val Pro
680	685 690

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<400> 256
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<213> Artificial Sequence

<220>
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<210> 258
<211> 45
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<210> 259
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<213> Homo sapiens

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<222> 3635
<223> unknown base

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<210> 260
<211> 802
<212> PRT
<213> Homo sapiens
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<400> 260

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Leu	Val	Leu	Gly	Phe	Val	Leu	Ala	Ser	Arg	Leu	Val	Leu	Pro	Arg	20	25	30	
Ala	Ser	Glu	Leu	Lys	Arg	Ala	Gly	Pro	Arg	Arg	Arg	Ala	Ser	Pro	35	40	45	
Glu	Gly	Cys	Arg	Ser	Gly	Gln	Ala	Ala	Ala	Ser	Gln	Ala	Gly	Gly	50	55	60	
Ala	Arg	Gly	Asp	Ala	Arg	Gly	Ala	Gln	Leu	Trp	Pro	Pro	Gly	Ser	65	70	75	
Asp	Pro	Asp	Gly	Gly	Pro	Arg	Asp	Arg	Asn	Phe	Leu	Phe	Val	Gly	80	85	90	
Val	Met	Thr	Ala	Gln	Lys	Tyr	Leu	Gln	Thr	Arg	Ala	Val	Ala	Ala	95	100	105	
Tyr	Arg	Thr	Trp	Ser	Lys	Thr	Ile	Pro	Gly	Lys	Val	Gln	Phe	Phe	110	115	120	
Ser	Ser	Glu	Gly	Ser	Asp	Thr	Ser	Val	Pro	Ile	Pro	Val	Val	Pro	125	130	135	
Leu	Arg	Gly	Val	Asp	Asp	Ser	Tyr	Pro	Pro	Gln	Lys	Lys	Ser	Phe	140	145	150	
Met	Met	Leu	Lys	Tyr	Met	His	Asp	His	Tyr	Leu	Asp	Lys	Tyr	Glu	155	160	165	
Trp	Phe	Met	Arg	Ala	Asp	Asp	Asp	Val	Tyr	Ile	Lys	Gly	Asp	Arg	170	175	180	
Leu	Glu	Asn	Phe	Leu	Arg	Ser	Leu	Asn	Ser	Ser	Glu	Pro	Leu	Phe	185	190	195	
Leu	Gly	Gln	Thr	Gly	Leu	Gly	Thr	Thr	Glu	Glu	Met	Gly	Lys	Leu	200	205	210	
Ala	Leu	Glu	Pro	Gly	Glu	Asn	Phe	Cys	Met	Gly	Gly	Pro	Gly	Val	215	220	225	
Ile	Met	Ser	Arg	Glu	Val	Leu	Arg	Arg	Met	Val	Pro	His	Ile	Gly	230	235	240	
Lys	Cys	Leu	Arg	Glu	Met	Tyr	Thr	Thr	His	Glu	Asp	Val	Glu	Val	245	250	255	
Gly	Arg	Cys	Val	Arg	Arg	Phe	Ala	Gly	Val	Gln	Cys	Val	Trp	Ser	260	265	270	
Tyr	Glu	Met	Arg	Gln	Leu	Phe	Tyr	Glu	Asn	Tyr	Glu	Gln	Asn	Lys				

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Lys Gly Tyr Ile	Arg Asp Leu His Asn	Ser Lys Ile His Gln	Ala
	290	295	300
Ile Thr Leu His	Pro Asn Lys Asn Pro	Pro Tyr Gln Tyr Arg	Leu
	305	310	315
His Ser Tyr Met	Leu Ser Arg Lys Ile	Ser Glu Leu Arg His	Arg
	320	325	330
Thr Ile Gln Leu	His Arg Glu Ile Val	Leu Met Ser Lys Tyr	Ser
	335	340	345
Asn Thr Glu Ile	His Lys Glu Asp Leu	Gln Leu Gly Ile Pro	Pro
	350	355	360
Ser Phe Met Arg	Phe Gln Pro Arg Gln	Arg Glu Glu Ile Leu	Glu
	365	370	375
Trp Glu Phe Leu	Thr Gly Lys Tyr Leu	Tyr Ser Ala Val Asp	Gly
	380	385	390
Gln Pro Pro Arg	Arg Gly Met Asp Ser	Ala Gln Arg Glu Ala	Leu
	395	400	405
Asp Asp Ile Val	Met Gln Val Met Glu	Met Ile Asn Ala Asn	Ala
	410	415	420
Lys Thr Arg Gly	Arg Ile Ile Asp Phe	Lys Glu Ile Gln Tyr	Gly
	425	430	435
Tyr Arg Arg Val	Asn Pro Met Tyr Gly	Ala Glu Tyr Ile Leu	Asp
	440	445	450
Leu Leu Leu Leu	Tyr Lys Lys His Lys	Gly Lys Lys Met Thr	Val
	455	460	465
Pro Val Arg Arg	His Ala Tyr Leu Gln	Gln Thr Phe Ser Lys	Ile
	470	475	480
Gln Phe Val Glu	His Glu Glu Leu Asp	Ala Gln Glu Leu Ala	Lys
	485	490	495
Arg Ile Asn Gln	Glu Ser Gly Ser Leu	Ser Phe Leu Ser Asn	Ser
	500	505	510
Leu Lys Lys Leu	Val Pro Phe Gln Leu	Pro Gly Ser Lys Ser	Glu
	515	520	525
His Lys Glu Pro	Lys Asp Lys Lys Ile	Asn Ile Leu Ile Pro	Leu
	530	535	540
Ser Gly Arg Phe	Asp Met Phe Val Arg	Phe Met Gly Asn Phe	Glu
	545	550	555
Lys Thr Cys Leu	Ile Pro Asn Gln Asn	Val Lys Leu Val Val	Leu

	560	565	570
Leu Phe Asn Ser	Asp Ser Asn Pro Asp	Lys Ala Lys Gln Val	Glu
	575	580	585
Leu Met Arg Asp	Tyr Arg Ile Lys Tyr	Pro Lys Ala Asp Met	Gln
	590	595	600
Ile Leu Pro Val	Ser Gly Glu Phe Ser	Arg Ala Leu Ala Leu	Glu
	605	610	615
Val Gly Ser Ser	Gln Phe Asn Asn Glu	Ser Leu Leu Phe Phe	Cys
	620	625	630
Asp Val Asp Leu	Val Phe Thr Thr Glu	Phe Leu Gln Arg Cys	Arg
	635	640	645
Ala Asn Thr Val	Leu Gly Gln Gln Ile	Tyr Phe Pro Ile Ile	Phe
	650	655	660
Ser Gln Tyr Asp	Pro Lys Ile Val Tyr	Ser Gly Lys Val Pro	Ser
	665	670	675
Asp Asn His Phe	Ala Phe Thr Gln Lys	Thr Gly Phe Trp Arg	Asn
	680	685	690
Tyr Gly Phe Gly	Ile Thr Cys Ile Tyr	Lys Gly Asp Leu Val	Arg
	695	700	705
Val Gly Gly Phe	Asp Val Ser Ile Gln	Gly Trp Gly Leu Glu	Asp
	710	715	720
Val Asp Leu Phe	Asn Lys Val Val Gln	Ala Gly Leu Lys Thr	Phe
	725	730	735
Arg Ser Gln Glu	Val Gly Val Val His	Val His His Pro Val	Phe
	740	745	750
Cys Asp Pro Asn	Leu Asp Pro Lys Gln	Tyr Lys Met Cys Leu	Gly
	755	760	765
Ser Lys Ala Ser	Thr Tyr Gly Ser Thr	Gln Gln Leu Ala Glu	Met
	770	775	780
Trp Leu Glu Lys	Asn Asp Pro Ser Tyr	Ser Lys Ser Ser Asn	Asn
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Asn Gly Ser Val	Arg Thr Ala		
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 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

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<210> 263
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<212> DNA
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<210> 264
<211> 1419
<212> DNA
<213> Homo sapiens

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(The following information was obtained from the records of the Federal Bureau of Investigation.)

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<210> 265
<211> 350
<212> PRT
<213> Homo sapiens
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<400> 265
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Ser  Val  Pro  Ala  Tyr  Pro  Ser  Ile  Thr  Val  Thr  Pro  Asp  Glu  Glu
              20              25              30
Gln  Asn  Leu  Asn  His  Tyr  Ile  Gln  Val  Leu  Glu  Asn  Leu  Val  Arg
              35              40              45
Ser  Val  Pro  Ser  Gly  Glu  Pro  Gly  Arg  Glu  Lys  Lys  Ser  Asn  Ser
              50              55              60
Pro  Lys  His  Val  Tyr  Ser  Ile  Ala  Ser  Lys  Gly  Ser  Lys  Phe  Lys
              65              70              75
Glu  Leu  Val  Thr  His  Gly  Asp  Ala  Ser  Thr  Glu  Asn  Asp  Val  Leu
              80              85              90

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Thr	Asn	Pro	Ile	Ser	Glu	Glu	Thr	Thr	Thr	Phe	Pro	Thr	Gly	Gly	
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Phe	Thr	Pro	Glu	Ile	Gly	Lys	Lys	Lys	His	Thr	Glu	Ser	Thr	Pro	
				110					115					120	
Phe	Trp	Ser	Ile	Lys	Pro	Asn	Asn	Val	Ser	Ile	Val	Leu	His	Ala	
				125					130					135	
Glu	Glu	Pro	Tyr	Ile	Glu	Asn	Glu	Glu	Pro	Glu	Pro	Glu	Pro	Glu	
				140					145					150	
Pro	Ala	Ala	Lys	Gln	Thr	Glu	Ala	Pro	Arg	Met	Leu	Pro	Val	Val	
				155					160					165	
Thr	Glu	Ser	Ser	Thr	Ser	Pro	Tyr	Val	Thr	Ser	Tyr	Lys	Ser	Pro	
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Val	Thr	Thr	Leu	Asp	Lys	Ser	Thr	Gly	Ile	Glu	Ile	Ser	Thr	Glu	
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Ser	Glu	Asp	Val	Pro	Gln	Leu	Ser	Gly	Glu	Thr	Ala	Ile	Glu	Lys	
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Pro	Glu	Glu	Phe	Gly	Lys	His	Pro	Glu	Ser	Trp	Asn	Asn	Asp	Asp	
				215					220					225	
Ile	Leu	Lys	Lys	Ile	Leu	Asp	Ile	Asn	Ser	Gln	Val	Gln	Gln	Ala	
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Leu	Leu	Ser	Asp	Thr	Ser	Asn	Pro	Ala	Tyr	Arg	Glu	Asp	Ile	Glu	
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Ala	Ser	Lys	Asp	His	Leu	Lys	Arg	Ser	Leu	Ala	Leu	Ala	Ala	Ala	
				260					265					270	
Ala	Glu	His	Lys	Leu	Lys	Thr	Met	Tyr	Lys	Ser	Gln	Leu	Leu	Pro	
				275					280					285	
Val	Gly	Arg	Thr	Ser	Asn	Lys	Ile	Asp	Asp	Ile	Glu	Thr	Val	Ile	
				290					295					300	
Asn	Met	Leu	Cys	Asn	Ser	Arg	Ser	Lys	Leu	Tyr	Glu	Tyr	Leu	Asp	
				305					310					315	
Ile	Lys	Cys	Val	Pro	Pro	Glu	Met	Arg	Glu	Lys	Ala	Ala	Thr	Val	
				320					325					330	
Phe	Asn	Thr	Leu	Lys	Asn	Met	Cys	Arg	Ser	Arg	Arg	Val	Thr	Ala	
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Leu	Leu	Lys	Val	Tyr											
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<210> 266
 <211> 2403
 <212> DNA

<213> Homo sapiens

<400> 266

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<210> 267
 <211> 466
 <212> PRT
 <213> Homo sapiens

<400> 267
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				35					40					45
Thr	Ser	Ala	Glu	Ala 50	Met	Glu	Val	Arg	Phe 55	Phe	Arg	Asn	Gln	Phe 60
His	Ala	Val	Val	His 65	Leu	Tyr	Arg	Asp	Gly 70	Glu	Asp	Trp	Glu	Ser 75
Lys	Gln	Met	Pro	Gln 80	Tyr	Arg	Gly	Arg	Thr 85	Glu	Phe	Val	Lys	Asp 90
Ser	Ile	Ala	Gly	Gly 95	Arg	Val	Ser	Leu	Arg 100	Leu	Lys	Asn	Ile	Thr 105
Pro	Ser	Asp	Ile	Gly 110	Leu	Tyr	Gly	Cys	Trp 115	Phe	Ser	Ser	Gln	Ile 120
Tyr	Asp	Glu	Glu	Ala 125	Thr	Trp	Glu	Leu	Arg 130	Val	Ala	Ala	Leu	Gly 135
Ser	Leu	Pro	Leu	Ile 140	Ser	Ile	Val	Gly	Tyr 145	Val	Asp	Gly	Gly	Ile 150
Gln	Leu	Leu	Cys	Leu 155	Ser	Ser	Gly	Trp	Phe 160	Pro	Gln	Pro	Thr	Ala 165
Lys	Trp	Lys	Gly	Pro 170	Gln	Gly	Gln	Asp	Leu 175	Ser	Ser	Asp	Ser	Arg 180
Ala	Asn	Ala	Asp	Gly 185	Tyr	Ser	Leu	Tyr	Asp 190	Val	Glu	Ile	Ser	Ile 195
Ile	Val	Gln	Glu	Asn 200	Ala	Gly	Ser	Ile	Leu 205	Cys	Ser	Ile	His	Leu 210
Ala	Glu	Gln	Ser	His 215	Glu	Val	Glu	Ser	Lys 220	Val	Leu	Ile	Gly	Glu 225
Thr	Phe	Phe	Gln	Pro 230	Ser	Pro	Trp	Arg	Leu 235	Ala	Ser	Ile	Leu	Leu 240
Gly	Leu	Leu	Cys	Gly 245	Ala	Leu	Cys	Gly	Val 250	Val	Met	Gly	Met	Ile 255
Ile	Val	Phe	Phe	Lys 260	Ser	Lys	Gly	Lys	Ile 265	Gln	Ala	Glu	Leu	Asp 270
Trp	Arg	Arg	Lys	His 275	Gly	Gln	Ala	Glu	Leu 280	Arg	Asp	Ala	Arg	Lys 285
His	Ala	Val	Glu	Val 290	Thr	Leu	Asp	Pro	Glu 295	Thr	Ala	His	Pro	Lys 300
Leu	Cys	Val	Ser	Asp 305	Leu	Lys	Thr	Val	Thr 310	His	Arg	Lys	Ala	Pro 315
Gln	Glu	Val	Pro	His	Ser	Glu	Lys	Arg	Phe	Thr	Arg	Lys	Ser	Val

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<210> 269
<211> 423
<212> PRT
<213> Homo sapiens

<400> 269
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Val Leu Ala Val Cys Ile Gly Leu Thr Val His Tyr Val Arg Tyr
35 40 45
Asn Gln Lys Lys Thr Tyr Asn Tyr Tyr Ser Thr Leu Ser Phe Thr
50 55 60
Thr Asp Lys Leu Tyr Ala Glu Phe Gly Arg Glu Ala Ser Asn Asn
65 70 75
Phe Thr Glu Met Ser Gln Arg Leu Glu Ser Met Val Lys Asn Ala
80 85 90
Phe Tyr Lys Ser Pro Leu Arg Glu Glu Phe Val Lys Ser Gln Val
95 100 105
Ile Lys Phe Ser Gln Gln Lys His Gly Val Leu Ala His Met Leu
110 115 120
Leu Ile Cys Arg Phe His Ser Thr Glu Asp Pro Glu Thr Val Asp
125 130 135
Lys Ile Val Gln Leu Val Leu His Glu Lys Leu Gln Asp Ala Val
140 145 150
Gly Pro Pro Lys Val Asp Pro His Ser Val Lys Ile Lys Lys Ile
155 160 165
Asn Lys Thr Glu Thr Asp Ser Tyr Leu Asn His Cys Cys Gly Thr
170 175 180
Arg Arg Ser Lys Thr Leu Gly Gln Ser Leu Arg Ile Val Gly Gly
185 190 195
Thr Glu Val Glu Glu Gly Glu Trp Pro Trp Gln Ala Ser Leu Gln
200 205 210

Val Pro Cys Asp Tyr Asp His Cys Arg His Leu Gln Val Pro Cys
50 55 60

Lys Glu Leu Gln Arg Val Gly Pro Ala Ala Cys Leu Cys Pro Gly
65 70 75

Leu Ser Ser Pro Ala Gln Pro Pro Asp Pro Pro Arg Met Gly Glu
80 85 90

Val Arg Ile Ala Ala Glu Glu Gly Arg Ala Val Val His Trp Cys
95 100 105

Ala Pro Phe Ser Pro Val Leu His Tyr Trp Leu Leu Leu Trp Asp
110 115 120

Gly Ser Glu Ala Ala Gln Lys Gly Pro Pro Leu Asn Ala Thr Val
125 130 135

Arg Arg Ala Glu Leu Lys Gly Leu Lys Pro Gly Gly Ile Tyr Val
140 145 150

Val Cys Val Val Ala Ala Asn Glu Ala Gly Ala Ser Arg Val Pro
155 160 165

Gln Ala Gly Gly Glu Gly Leu Glu Gly Ala Asp Ile Pro Ala Phe
170 175 180

Gly Pro Cys Ser Arg Leu Ala Val Pro Pro Asn Pro Arg Thr Leu
185 190 195

Val His Ala Ala Val Gly Val Gly Thr Ala Leu Ala Leu Leu Ser
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Cys Ala Ala Leu Val Trp His Phe Cys Leu Arg Asp Arg Trp Gly
215 220 225

Cys Pro Arg Arg Ala Ala Ala Arg Ala Ala Gly Ala Leu
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<210> 272
<211> 2397
<212> DNA
<213> Homo sapiens

<400> 272
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tgcccttggg agtaggatgt ggtgaaagga tggggcttct cccttacggg 200
gctcacaatg gccagagaag attccgtgaa gtgtctgcgc tgcctgctct 250
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<210> 273
 <211> 305
 <212> PRT
 <213> Homo sapiens

<400> 273
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 20 25 30
 Val Ser Ala Trp Met Arg Asp Tyr Leu Asn Asn Val Leu Thr Leu
 35 40 45
 Thr Ala Glu Thr Arg Val Glu Glu Ala Val Ile Leu Thr Tyr Phe
 50 55 60
 Pro Val Val His Pro Val Met Ile Ala Val Cys Cys Phe Leu Ile
 65 70 75
 Ile Val Gly Met Leu Gly Tyr Cys Gly Thr Val Lys Arg Asn Leu
 80 85 90
 Leu Leu Leu Ala Trp Tyr Phe Gly Ser Leu Leu Val Ile Phe Cys
 95 100 105
 Val Glu Leu Ala Cys Gly Val Trp Thr Tyr Glu Gln Glu Leu Met
 110 115 120

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<210> 275

<211> 432

<212> PRT

<213> Homo sapiens

<400> 275

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Lys	Val	Gly	Ile	Pro	Ile	Ile	Ile	Ala	Leu	Leu	Ser	Leu	Ala	Ser	35	40	45	
Ile	Ile	Ile	Val	Val	Val	Leu	Ile	Lys	Val	Ile	Leu	Asp	Lys	Tyr	50	55	60	
Tyr	Phe	Leu	Cys	Gly	Gln	Pro	Leu	His	Phe	Ile	Pro	Arg	Lys	Gln	65	70	75	
Leu	Cys	Asp	Gly	Glu	Leu	Asp	Cys	Pro	Leu	Gly	Glu	Asp	Glu	Glu	80	85	90	
His	Cys	Val	Lys	Ser	Phe	Pro	Glu	Gly	Pro	Ala	Val	Ala	Val	Arg	95	100	105	
Leu	Ser	Lys	Asp	Arg	Ser	Thr	Leu	Gln	Val	Leu	Asp	Ser	Ala	Thr	110	115	120	
Gly	Asn	Trp	Phe	Ser	Ala	Cys	Phe	Asp	Asn	Phe	Thr	Glu	Ala	Leu	125	130	135	
Ala	Glu	Thr	Ala	Cys	Arg	Gln	Met	Gly	Tyr	Ser	Arg	Ala	Val	Glu	140	145	150	
Ile	Gly	Pro	Asp	Gln	Asp	Leu	Asp	Val	Val	Glu	Ile	Thr	Glu	Asn	155	160	165	
Ser	Gln	Glu	Leu	Arg	Met	Arg	Asn	Ser	Ser	Gly	Pro	Cys	Leu	Ser	170	175	180	

Gly	Ser	Leu	Val	Ser	Leu	His	Cys	Leu	Ala	Cys	Gly	Lys	Ser	Leu
				185					190					195
Lys	Thr	Pro	Arg	Val	Val	Gly	Gly	Glu	Glu	Ala	Ser	Val	Asp	Ser
				200					205					210
Trp	Pro	Trp	Gln	Val	Ser	Ile	Gln	Tyr	Asp	Lys	Gln	His	Val	Cys
				215					220					225
Gly	Gly	Ser	Ile	Leu	Asp	Pro	His	Trp	Val	Leu	Thr	Ala	Ala	His
				230					235					240
Cys	Phe	Arg	Lys	His	Thr	Asp	Val	Phe	Asn	Trp	Lys	Val	Arg	Ala
				245					250					255
Gly	Ser	Asp	Lys	Leu	Gly	Ser	Phe	Pro	Ser	Leu	Ala	Val	Ala	Lys
				260					265					270
Ile	Ile	Ile	Ile	Glu	Phe	Asn	Pro	Met	Tyr	Pro	Lys	Asp	Asn	Asp
				275					280					285
Ile	Ala	Leu	Met	Lys	Leu	Gln	Phe	Pro	Leu	Thr	Phe	Ser	Gly	Thr
				290					295					300
Val	Arg	Pro	Ile	Cys	Leu	Pro	Phe	Phe	Asp	Glu	Glu	Leu	Thr	Pro
				305					310					315
Ala	Thr	Pro	Leu	Trp	Ile	Ile	Gly	Trp	Gly	Phe	Thr	Lys	Gln	Asn
				320					325					330
Gly	Gly	Lys	Met	Ser	Asp	Ile	Leu	Leu	Gln	Ala	Ser	Val	Gln	Val
				335					340					345
Ile	Asp	Ser	Thr	Arg	Cys	Asn	Ala	Asp	Asp	Ala	Tyr	Gln	Gly	Glu
				350					355					360
Val	Thr	Glu	Lys	Met	Met	Cys	Ala	Gly	Ile	Pro	Glu	Gly	Gly	Val
				365					370					375
Asp	Thr	Cys	Gln	Gly	Asp	Ser	Gly	Gly	Pro	Leu	Met	Tyr	Gln	Ser
				380					385					390
Asp	Gln	Trp	His	Val	Val	Gly	Ile	Val	Ser	Trp	Gly	Tyr	Gly	Cys
				395					400					405
Gly	Gly	Pro	Ser	Thr	Pro	Gly	Val	Tyr	Thr	Lys	Val	Ser	Ala	Tyr
				410					415					420
Leu	Asn	Trp	Ile	Tyr	Asn	Val	Trp	Lys	Ala	Glu	Leu			
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<210> 276
<211> 3143
<212> DNA
<213> Homo sapiens
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<400> 276

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<210> 277

<211> 761

<212> PRT

<213> Homo sapiens

<400> 277

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Ala	Gly	Gly	Gly	Gly	Gln	Gly	Pro	Met	Pro	Arg	Val	Arg	Tyr	Tyr	35	40	45	
Ala	Gly	Asp	Glu	Arg	Arg	Ala	Leu	Ser	Phe	Phe	His	Gln	Lys	Gly	50	55	60	
Leu	Gln	Asp	Phe	Asp	Thr	Leu	Leu	Leu	Ser	Gly	Asp	Gly	Asn	Thr	65	70	75	
Leu	Tyr	Val	Gly	Ala	Arg	Glu	Ala	Ile	Leu	Ala	Leu	Asp	Ile	Gln	80	85	90	
Asp	Pro	Gly	Val	Pro	Arg	Leu	Lys	Asn	Met	Ile	Pro	Trp	Pro	Ala	95	100	105	
Ser	Asp	Arg	Lys	Lys	Ser	Glu	Cys	Ala	Phe	Lys	Lys	Lys	Ser	Asn	110	115	120	
Glu	Thr	Gln	Cys	Phe	Asn	Phe	Ile	Arg	Val	Leu	Val	Ser	Tyr	Asn	125	130	135	
Val	Thr	His	Leu	Tyr	Thr	Cys	Gly	Thr	Phe	Ala	Phe	Ser	Pro	Ala	140	145	150	
Cys	Thr	Phe	Ile	Glu	Leu	Gln	Asp	Ser	Tyr	Leu	Leu	Pro	Ile	Ser	155	160	165	
Glu	Asp	Lys	Val	Met	Glu	Gly	Lys	Gly	Gln	Ser	Pro	Phe	Asp	Pro	170	175	180	
Ala	His	Lys	His	Thr	Ala	Val	Leu	Val	Asp	Gly	Met	Leu	Tyr	Ser	185	190	195	

Gly Thr Met Asn	Asn Phe Leu Gly Ser	Glu Pro Ile Leu Met	Arg
	200	205	210
Thr Leu Gly Ser	Gln Pro Val Leu Lys	Thr Asp Asn Phe Leu	Arg
	215	220	225
Trp Leu His His	Asp Ala Ser Phe Val	Ala Ala Ile Pro Ser	Thr
	230	235	240
Gln Val Val Tyr	Phe Phe Phe Glu Glu	Thr Ala Ser Glu Phe	Asp
	245	250	255
Phe Phe Glu Arg	Leu His Thr Ser Arg	Val Ala Arg Val Cys	Lys
	260	265	270
Asn Asp Val Gly	Gly Glu Lys Leu Leu	Gln Lys Lys Trp Thr	Thr
	275	280	285
Phe Leu Lys Ala	Gln Leu Leu Cys Thr	Gln Pro Gly Gln Leu	Pro
	290	295	300
Phe Asn Val Ile	Arg His Ala Val Leu	Leu Pro Ala Asp Ser	Pro
	305	310	315
Thr Ala Pro His	Ile Tyr Ala Val Phe	Thr Ser Gln Trp Gln	Val
	320	325	330
Gly Gly Thr Arg	Ser Ser Ala Val Cys	Ala Phe Ser Leu Leu	Asp
	335	340	345
Ile Glu Arg Val	Phe Lys Gly Lys Tyr	Lys Glu Leu Asn Lys	Glu
	350	355	360
Thr Ser Arg Trp	Thr Thr Tyr Arg Gly	Pro Glu Thr Asn Pro	Arg
	365	370	375
Pro Gly Ser Cys	Ser Val Gly Pro Ser	Ser Asp Lys Ala Leu	Thr
	380	385	390
Phe Met Lys Asp	His Phe Leu Met Asp	Glu Gln Val Val Gly	Thr
	395	400	405
Pro Leu Leu Val	Lys Ser Gly Val Glu	Tyr Thr Arg Leu Ala	Val
	410	415	420
Glu Thr Ala Gln	Gly Leu Asp Gly His	Ser His Leu Val Met	Tyr
	425	430	435
Leu Gly Thr Thr	Thr Gly Ser Leu His	Lys Ala Val Val Ser	Gly
	440	445	450
Asp Ser Ser Ala	His Leu Val Glu Glu	Ile Gln Leu Phe Pro	Asp
	455	460	465
Pro Glu Pro Val	Arg Asn Leu Gln Leu	Ala Pro Thr Gln Gly	Ala
	470	475	480

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Val	Phe	Val	Gly	Phe	Ser	Gly	Gly	Val	Trp	Arg	Val	Pro	Arg	Ala	485	490	495
Asn	Cys	Ser	Val	Tyr	Glu	Ser	Cys	Val	Asp	Cys	Val	Leu	Ala	Arg	500	505	510
Asp	Pro	His	Cys	Ala	Trp	Asp	Pro	Glu	Ser	Arg	Thr	Cys	Cys	Leu	515	520	525
Leu	Ser	Ala	Pro	Asn	Leu	Asn	Ser	Trp	Lys	Gln	Asp	Met	Glu	Arg	530	535	540
Gly	Asn	Pro	Glu	Trp	Ala	Cys	Ala	Ser	Gly	Pro	Met	Ser	Arg	Ser	545	550	555
Leu	Arg	Pro	Gln	Ser	Arg	Pro	Gln	Ile	Ile	Lys	Glu	Val	Leu	Ala	560	565	570
Val	Pro	Asn	Ser	Ile	Leu	Glu	Leu	Pro	Cys	Pro	His	Leu	Ser	Ala	575	580	585
Leu	Ala	Ser	Tyr	Tyr	Trp	Ser	His	Gly	Pro	Ala	Ala	Val	Pro	Glu	590	595	600
Ala	Ser	Ser	Thr	Val	Tyr	Asn	Gly	Ser	Leu	Leu	Leu	Ile	Val	Gln	605	610	615
Asp	Gly	Val	Gly	Gly	Leu	Tyr	Gln	Cys	Trp	Ala	Thr	Glu	Asn	Gly	620	625	630
Phe	Ser	Tyr	Pro	Val	Ile	Ser	Tyr	Trp	Val	Asp	Ser	Gln	Asp	Gln	635	640	645
Thr	Leu	Ala	Leu	Asp	Pro	Glu	Leu	Ala	Gly	Ile	Pro	Arg	Glu	His	650	655	660
Val	Lys	Val	Pro	Leu	Thr	Arg	Val	Ser	Gly	Gly	Ala	Ala	Leu	Ala	665	670	675
Ala	Gln	Gln	Ser	Tyr	Trp	Pro	His	Phe	Val	Thr	Val	Thr	Val	Leu	680	685	690
Phe	Ala	Leu	Val	Leu	Ser	Gly	Ala	Leu	Ile	Ile	Leu	Val	Ala	Ser	695	700	705
Pro	Leu	Arg	Ala	Leu	Arg	Ala	Arg	Gly	Lys	Val	Gln	Gly	Cys	Glu	710	715	720
Thr	Leu	Arg	Pro	Gly	Glu	Lys	Ala	Pro	Leu	Ser	Arg	Glu	Gln	His	725	730	735
Leu	Gln	Ser	Pro	Lys	Glu	Cys	Arg	Thr	Ser	Ala	Ser	Asp	Val	Asp	740	745	750
Ala	Asp	Asn	Asn	Cys	Leu	Gly	Thr	Glu	Val	Ala					755	760	

[Faint, illegible text from the reverse side of the page]

<220>
<223> Synthetic oligonucleotide probe

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<400> 278
ctgctggtga aatctggcgt ggag 24
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<210> 279
<211> 24
<212> DNA
<213> Artificial Sequence
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<220>
<223> Synthetic oligonucleotide probe

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<400> 279
gtctggtcct ggctgtccac ccag 24
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<210> 280
<211> 45
<212> DNA
<213> Artificial Sequence
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<220>
<223> Synthetic oligonucleotide probe

<400> 280
catcttggtca tgtacctggg aaccaccaca gggtcgctcc acaag 45

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<210> 281
<211> 2320
<212> DNA
<213> Homo sapiens
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atctacagta ggtggaagcc attatctact gatggaccgg gtttctcaga 200
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tctttctgga agaaacttta ggtggcagag gaaaatttga aaacttatta 400
aatgttctag aatacttggc gttgcagtgc agtcattttt taaatagaaa 450
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ggatatcatg gattccttaa agaatgagaa cttcgacatg gtgatagtgtg 500
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<210> 282

<211> 523

<212> PRT

<213> Homo sapiens

<400> 282

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Gly	Val	Leu	Leu	Ser	Glu	Ala	Ala	Lys	Ile	Leu	Thr	Ile	Ser	Thr
				20					25					30
Val	Gly	Gly	Ser	His	Tyr	Leu	Leu	Met	Asp	Arg	Val	Ser	Gln	Ile
				35					40					45
Leu	Gln	Asp	His	Gly	His	Asn	Val	Thr	Met	Leu	Asn	His	Lys	Arg
				50					55					60
Gly	Pro	Phe	Met	Pro	Asp	Phe	Lys	Lys	Glu	Glu	Lys	Ser	Tyr	Gln
				65					70					75
Val	Ile	Ser	Trp	Leu	Ala	Pro	Glu	Asp	His	Gln	Arg	Glu	Phe	Lys
				80					85					90
Lys	Ser	Phe	Asp	Phe	Phe	Leu	Glu	Glu	Thr	Leu	Gly	Gly	Arg	Gly
				95					100					105
Lys	Phe	Glu	Asn	Leu	Leu	Asn	Val	Leu	Glu	Tyr	Leu	Ala	Leu	Gln
				110					115					120
Cys	Ser	His	Phe	Leu	Asn	Arg	Lys	Asp	Ile	Met	Asp	Ser	Leu	Lys
				125					130					135
Asn	Glu	Asn	Phe	Asp	Met	Val	Ile	Val	Glu	Thr	Phe	Asp	Tyr	Cys
				140					145					150
Pro	Phe	Leu	Ile	Ala	Glu	Lys	Leu	Gly	Lys	Pro	Phe	Val	Ala	Ile

155	160	165
Leu Ser Thr Ser Phe Gly Ser Leu Glu	Phe Gly Leu Pro Ile Pro	
170	175	180
Leu Ser Tyr Val Pro Val Phe Arg Ser	Leu Leu Thr Asp His Met	
185	190	195
Asp Phe Trp Gly Arg Val Lys Asn Phe	Leu Met Phe Phe Ser Phe	
200	205	210
Cys Arg Arg Gln Gln His Met Gln Ser	Thr Phe Asp Asn Thr Ile	
215	220	225
Lys Glu His Phe Thr Glu Gly Ser Arg	Pro Val Leu Ser His Leu	
230	235	240
Leu Leu Lys Ala Glu Leu Trp Phe Ile	Asn Ser Asp Phe Ala Phe	
245	250	255
Asp Phe Ala Arg Pro Leu Leu Pro Asn	Thr Val Tyr Val Gly Gly	
260	265	270
Leu Met Glu Lys Pro Ile Lys Pro Val	Pro Gln Asp Leu Glu Asn	
275	280	285
Phe Ile Ala Lys Phe Gly Asp Ser Gly	Phe Val Leu Val Thr Leu	
290	295	300
Gly Ser Met Val Asn Thr Cys Gln Asn	Pro Glu Ile Phe Lys Glu	
305	310	315
Met Asn Asn Ala Phe Ala His Leu Pro	Gln Gly Val Ile Trp Lys	
320	325	330
Cys Gln Cys Ser His Trp Pro Lys Asp	Val His Leu Ala Ala Asn	
335	340	345
Val Lys Ile Val Asp Trp Leu Pro Gln	Ser Asp Leu Leu Ala His	
350	355	360
Pro Ser Ile Arg Leu Phe Val Thr His	Gly Gly Gln Asn Ser Ile	
365	370	375
Met Glu Ala Ile Gln His Gly Val Pro	Met Val Gly Ile Pro Leu	
380	385	390
Phe Gly Asp Gln Pro Glu Asn Met Val	Arg Val Glu Ala Lys Lys	
395	400	405
Phe Gly Val Ser Ile Gln Leu Lys Lys	Leu Lys Ala Glu Thr Leu	
410	415	420
Ala Leu Lys Met Lys Gln Ile Met Glu	Asp Lys Arg Tyr Lys Ser	
425	430	435
Ala Ala Val Ala Ala Ser Val Ile Leu	Arg Ser His Pro Leu Ser	

440	445	450
Pro Thr Gln Arg Leu Val Gly Trp Ile Asp His Val Leu Gln Thr		
455	460	465
Gly Gly Ala Thr His Leu Lys Pro Tyr Val Phe Gln Gln Pro Trp		
470	475	480
His Glu Gln Tyr Leu Phe Asp Val Phe Val Phe Leu Leu Gly Leu		
485	490	495
Thr Leu Gly Thr Leu Trp Leu Cys Gly Lys Leu Leu Gly Met Ala		
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Val Trp Trp Leu Arg Gly Ala Arg Lys Val Lys Glu Thr		
515	520	

<210> 283
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 283
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<210> 284
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 284
 tcaggctggt ctccaaagag aggg 24

<210> 285
 <211> 45
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 285
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<210> 286
 <211> 2340
 <212> DNA
 <213> Homo sapiens

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cccgtcacac	acacatacca	tgtttctccat	ccccccaggt	ccagccctca	150
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ggcaaggttt	ggcaagaagg	aagatctgca	ctactttgcg	gcctctgctc	1400
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caactagaga atgggtggta gtgagacact atagaattac taaggagaag 2250
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<210> 287
<211> 205
<212> PRT
<213> Homo sapiens

<400> 287
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20 25 30
Trp Ala Gln Glu Gly Ser Glu Pro Val Leu Leu Glu Gly Glu Cys
35 40 45
Leu Val Val Cys Glu Pro Gly Arg Ala Ala Ala Gly Gly Pro Gly
50 55 60
Gly Ala Ala Leu Gly Glu Ala Pro Pro Gly Arg Val Ala Phe Ala
65 70 75

Ala	Val	Arg	Ser	His	His	His	Glu	Pro	Ala	Gly	Glu	Thr	Gly	Asn	
				80					85					90	
Gly	Thr	Ser	Gly	Ala	Ile	Tyr	Phe	Asp	Gln	Val	Leu	Val	Asn	Glu	
				95					100					105	
Gly	Gly	Gly	Phe	Asp	Arg	Ala	Ser	Gly	Ser	Phe	Val	Ala	Pro	Val	
				110					115					120	
Arg	Gly	Val	Tyr	Ser	Phe	Arg	Phe	His	Val	Val	Lys	Val	Tyr	Asn	
				125					130					135	
Arg	Gln	Thr	Val	Gln	Val	Ser	Leu	Met	Leu	Asn	Thr	Trp	Pro	Val	
				140					145					150	
Ile	Ser	Ala	Phe	Ala	Asn	Asp	Pro	Asp	Val	Thr	Arg	Glu	Ala	Ala	
				155					160					165	
Thr	Ser	Ser	Val	Leu	Leu	Pro	Leu	Asp	Pro	Gly	Asp	Arg	Val	Ser	
				170					175					180	
Leu	Arg	Leu	Arg	Arg	Gly	Asn	Leu	Leu	Gly	Gly	Trp	Lys	Tyr	Ser	
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<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 288

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<211> 27

<212> DNA

<213> Artificial Sequence

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<223> Synthetic oligonucleotide probe

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<210> 290

<211> 42

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

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<210> 291
<211> 1570
<212> DNA
<213> Homo sapiens

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ttcccgcggg gccgtgactg ggcgggcttc agccatgaag accctcatag 200
ccgcctactc cggggtcctg cgcggcgagc gtcaggccga ggctgaccgg 250
agccagcgct ctacaggagg acctgcgctg tcgcgcgagg ggtctgggag 300
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tcacctggct caatagggtcc aaggtggaaa agcagctaca ggtcatctca 400
gtgctccagt gggtcctgtc cttccttgta ctgggagtgg cctgcagtgc 450
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acttcacttg gctggtgttt gactggaaca caccgaagaa aggtggcagg 550
aggtcacagt gggtcgaaa ctgggctgtg tggcgctact ttcgagacta 600
ctttcccatc cagctggtga agacacacaa cctgctgacc accaggaact 650
atatcttttg ataccacccc catggtatca tgggectggg tgccttctgc 700
aacttcagca cagaggccac agaagtgagc aagaagttcc caggcatacg 750
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agtacctgat gtctggaggt atctgcctg tcagccggga caccatagac 850
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gacacctggg ggctgggtgcc ctactccaag cccatcacca ctgtttgtggg 1200

1. The first group of people who are interested in the results of the study are the researchers themselves. They want to know how well the study was conducted and whether the results are reliable. 2. The second group of people who are interested in the results of the study are the people who are involved in the study. They want to know how the study was conducted and whether the results are reliable. 3. The third group of people who are interested in the results of the study are the people who are affected by the study. They want to know how the study was conducted and whether the results are reliable. 4. The fourth group of people who are interested in the results of the study are the people who are interested in the study. They want to know how the study was conducted and whether the results are reliable. 5. The fifth group of people who are interested in the results of the study are the people who are interested in the study. They want to know how the study was conducted and whether the results are reliable.

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<210> 292
<211> 388
<212> PRT
<213> Homo sapiens
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<400>	292														
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				20					25					30	
Ala	Leu	Ser	Arg	Glu	Gly	Ser	Gly	Arg	Trp	Gly	Thr	Gly	Ser	Ser	
				35					40					45	
Ile	Leu	Ser	Ala	Leu	Gln	Asp	Leu	Phe	Ser	Val	Thr	Trp	Leu	Asn	
				50					55					60	
Arg	Ser	Lys	Val	Glu	Lys	Gln	Leu	Gln	Val	Ile	Ser	Val	Leu	Gln	
				65					70					75	
Trp	Val	Leu	Ser	Phe	Leu	Val	Leu	Gly	Val	Ala	Cys	Ser	Ala	Ile	
				80					85					90	
Leu	Met	Tyr	Ile	Phe	Cys	Thr	Asp	Cys	Trp	Leu	Ile	Ala	Val	Leu	
				95					100					105	
Tyr	Phe	Thr	Trp	Leu	Val	Phe	Asp	Trp	Asn	Thr	Pro	Lys	Lys	Gly	
				110					115					120	
Gly	Arg	Arg	Ser	Gln	Trp	Val	Arg	Asn	Trp	Ala	Val	Trp	Arg	Tyr	
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Phe	Arg	Asp	Tyr	Phe	Pro	Ile	Gln	Leu	Val	Lys	Thr	His	Asn	Leu	
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Leu	Thr	Thr	Arg	Asn	Tyr	Ile	Phe	Gly	Tyr	His	Pro	His	Gly	Ile	
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Met	Gly	Leu	Gly	Ala	Phe	Cys	Asn	Phe	Ser	Thr	Glu	Ala	Thr	Glu	
				170					175					180	

Val	Ser	Lys	Lys	Phe 185	Pro	Gly	Ile	Arg	Pro 190	Tyr	Leu	Ala	Thr	Leu 195
Ala	Gly	Asn	Phe	Arg 200	Met	Pro	Val	Leu	Arg 205	Glu	Tyr	Leu	Met	Ser 210
Gly	Gly	Ile	Cys	Pro 215	Val	Ser	Arg	Asp	Thr 220	Ile	Asp	Tyr	Leu	Leu 225
Ser	Lys	Asn	Gly	Ser 230	Gly	Asn	Ala	Ile	Ile 235	Ile	Val	Val	Gly	Gly 240
Ala	Ala	Glu	Ser	Leu 245	Ser	Ser	Met	Pro	Gly 250	Lys	Asn	Ala	Val	Thr 255
Leu	Arg	Asn	Arg	Lys 260	Gly	Phe	Val	Lys	Leu 265	Ala	Leu	Arg	His	Gly 270
Ala	Asp	Leu	Val	Pro 275	Ile	Tyr	Ser	Phe	Gly 280	Glu	Asn	Glu	Val	Tyr 285
Lys	Gln	Val	Ile	Phe 290	Glu	Glu	Gly	Ser	Trp 295	Gly	Arg	Trp	Val	Gln 300
Lys	Lys	Phe	Gln	Lys 305	Tyr	Ile	Gly	Phe	Ala 310	Pro	Cys	Ile	Phe	His 315
Gly	Arg	Gly	Leu	Phe 320	Ser	Ser	Asp	Thr	Trp 325	Gly	Leu	Val	Pro	Tyr 330
Ser	Lys	Pro	Ile	Thr 335	Thr	Val	Val	Gly	Glu 340	Pro	Ile	Thr	Ile	Pro 345
Lys	Leu	Glu	His	Pro 350	Thr	Gln	Gln	Asp	Ile 355	Asp	Leu	Tyr	His	Thr 360
Met	Tyr	Met	Glu	Ala 365	Leu	Val	Lys	Leu	Phe 370	Asp	Lys	His	Lys	Thr 375
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<210> 293

<211> 24

<212> DNA

<213> Artificial Sequence

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<223> Synthetic oligonucleotide probe

<400> 293

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<210> 294

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 294

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<210> 295

<211> 50

<212> DNA

<213> Artificial Sequence

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<223> Synthetic oligonucleotide probe

<400> 295

aagaatgaat tgtacaaagc aggtgatctt cgaggagggc tcctggggcc 50

<210> 296

<211> 3060

<212> DNA

<213> Homo sapiens

<400> 296

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cggggccgcg gaggcgacgc cggggacgcc cgcgcgacga gcagggtggcg 150
gcggctgcag gcttgtccag ccggaagccc tgagggcagc tgttcccact 200
ggctctgctg accttgtgcc ttggacggct gtcctcagcg aggggcccgtg 250
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ccaggggagac	tgaagtggga	ggatcgcttg	ggcatgagaa	gtcgaaggctg	3000
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<210> 297
<211> 368
<212> PRT
<213> Homo sapiens
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<400> 297
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Leu Val Gly Phe Val Phe Val Val Ser Gly Leu Val Ile Asn Phe
          20          25          30
Val Gln Leu Cys Thr Leu Ala Leu Trp Pro Val Ser Lys Gln Leu
          35          40          45
Tyr Arg Arg Leu Asn Cys Arg Leu Ala Tyr Ser Leu Trp Ser Gln
          50          55          60
Leu Val Met Leu Leu Glu Trp Trp Ser Cys Thr Glu Cys Thr Leu
          65          70          75
Phe Thr Asp Gln Ala Thr Val Glu Arg Phe Gly Lys Glu His Ala

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80										85					90				
Val	Ile	Ile	Leu	Asn	His	Asn	Phe	Glu	Ile	Asp	Phe	Leu	Cys	Gly					
				95					100					105					
Trp	Thr	Met	Cys	Glu	Arg	Phe	Gly	Val	Leu	Gly	Ser	Ser	Lys	Val					
				110					115					120					
Leu	Ala	Lys	Lys	Glu	Leu	Leu	Tyr	Val	Pro	Leu	Ile	Gly	Trp	Thr					
				125					130					135					
Trp	Tyr	Phe	Leu	Glu	Ile	Val	Phe	Cys	Lys	Arg	Lys	Trp	Glu	Glu					
				140					145					150					
Asp	Arg	Asp	Thr	Val	Val	Glu	Gly	Leu	Arg	Arg	Leu	Ser	Asp	Tyr					
				155					160					165					
Pro	Glu	Tyr	Met	Trp	Phe	Leu	Leu	Tyr	Cys	Glu	Gly	Thr	Arg	Phe					
				170					175					180					
Thr	Glu	Thr	Lys	His	Arg	Val	Ser	Met	Glu	Val	Ala	Ala	Ala	Lys					
				185					190					195					
Gly	Leu	Pro	Val	Leu	Lys	Tyr	His	Leu	Leu	Pro	Arg	Thr	Lys	Gly					
				200					205					210					
Phe	Thr	Thr	Ala	Val	Lys	Cys	Leu	Arg	Gly	Thr	Val	Ala	Ala	Val					
				215					220					225					
Tyr	Asp	Val	Thr	Leu	Asn	Phe	Arg	Gly	Asn	Lys	Asn	Pro	Ser	Leu					
				230					235					240					
Leu	Gly	Ile	Leu	Tyr	Gly	Lys	Lys	Tyr	Glu	Ala	Asp	Met	Cys	Val					
				245					250					255					
Arg	Arg	Phe	Pro	Leu	Glu	Asp	Ile	Pro	Leu	Asp	Glu	Lys	Glu	Ala					
				260					265					270					
Ala	Gln	Trp	Leu	His	Lys	Leu	Tyr	Gln	Glu	Lys	Asp	Ala	Leu	Gln					
				275					280					285					
Glu	Ile	Tyr	Asn	Gln	Lys	Gly	Met	Phe	Pro	Gly	Glu	Gln	Phe	Lys					
				290					295					300					
Pro	Ala	Arg	Arg	Pro	Trp	Thr	Leu	Leu	Asn	Phe	Leu	Ser	Trp	Ala					
				305					310					315					
Thr	Ile	Leu	Leu	Ser	Pro	Leu	Phe	Ser	Phe	Val	Leu	Gly	Val	Phe					
				320					325					330					
Ala	Ser	Gly	Ser	Pro	Leu	Leu	Ile	Leu	Thr	Phe	Leu	Gly	Phe	Val					
				335					340					345					
Gly	Ala	Ala	Ser	Phe	Gly	Val	Arg	Arg	Leu	Ile	Gly	Glu	Ser	Leu					
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Glu	Pro	Gly	Arg	Trp	Arg	Leu	Gln												

<210> 298
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 298
cttcctctgt ggggtggacca tgtg 24

<210> 299
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 299
gccacctcca tgctaacgcg g 21

<210> 300
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 300
ccaaggtcct cgctaagaag gagctgctct acgtgccoct catcg 45

<210> 301
<211> 1334
<212> DNA
<213> Homo sapiens

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tcagtttgtc ttgtgggggt ggtggcaggc aggccggcctt acgcctgata 200
cggccctggg ttagaaggga agggaagata aacttttata caaatgggga 250
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 gtcccagcta cttgggaggc tgaagcaaga gaatcgcttg aacctgggag 1250
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<210> 302
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 302
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 Leu Leu Ile Ser Leu Val Gly Lys Gly Leu Ser Leu Ser Cys Gly
 35 40 45
 Val Gly Gly Arg Gln Ala Gly Leu Arg Leu Ile Arg Pro Trp Val
 50 55 60
 Arg Arg Glu Gly Lys Ile Asn Phe Tyr Thr Asn Gly Asp Ser Trp

	65		70		75
Gly Leu Arg Pro Ala Ser Ser Val Lys Phe Leu Gly Ser Ala Tyr					
	80		85		90
Thr Phe Phe Ser Leu Thr Trp His Thr Leu Leu Lys Ala Ser Gln					
	95		100		105
Gly Phe Ser Leu Phe Leu Gly Ser Lys Tyr Leu Glu Leu Gln Glu					
	110		115		120
Pro Ser Trp Ser Gly Pro Cys Pro Pro Gly Gln Leu His Cys Thr					
	125		130		135
Cys Gly Val Leu Leu Ser Phe Leu					
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<210> 303
 <211> 1768
 <212> DNA
 <213> Homo sapiens

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 tttgttctct tgtaactagc ctttaccttc ctaacacaga ggatctgtca 250
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 <211> 109
 <212> PRT
 <213> Homo sapiens

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 Asp Leu Ser Leu Trp Leu Trp Pro Lys Pro Asp Leu His Ser Gly
 35 40 45
 Thr Arg Thr Glu Val Ser Thr His Thr Val Pro Ser Lys Pro Gly
 50 55 60
 Thr Ala Ser Pro Cys Trp Pro Leu Ala Gly Ala Val Pro Ser Pro

	65		70		75
Thr Val Ser Arg Leu Glu Ala Leu Thr Arg Ala Val Gln Val Ala					
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Glu Pro Leu Gly Ser Cys Gly Phe Gln Gly Gly Pro Cys Pro Gly					
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Arg Arg Arg Asp					

<210> 305
 <211> 989
 <212> DNA
 <213> Homo sapiens

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100-443881-1000

<400> 306

Leu Thr Leu Ala Phe Lys Ile
260

<210> 307
<211> 2272
<212> DNA
<213> Homo sapiens

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ggatggcgcc gtgaagcccc caccacaaca gtaccccatc tttttctttg 200
gcacacacga aacagccttc ctgggaccca aggacctgtt cccctacgac 250
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<210> 308
<211> 671
<212> PRT
<213> Homo sapiens

<400> 308
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Gly Ala Val Lys Pro Pro Pro Asn Lys Tyr Pro Ile Phe Phe Phe

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Gly Thr His Glu Thr Ala Phe Leu Gly Pro Lys Asp Leu Phe Pro	50		55		60
Tyr Asp Lys Cys Lys Asp Lys Tyr Gly Lys Pro Asn Lys Arg Lys	65		70		75
Gly Phe Asn Glu Gly Leu Trp Glu Ile Gln Asn Asn Pro His Ala	80		85		90
Ser Tyr Ser Ala Pro Pro Pro Val Ser Ser Ser Asp Ser Glu Ala	95		100		105
Pro Glu Ala Asn Pro Ala Asp Gly Ser Asp Ala Asp Glu Asp Asp	110		115		120
Glu Asp Arg Gly Val Met Ala Val Thr Ala Val Thr Ala Thr Ala	125		130		135
Ala Ser Asp Arg Met Glu Ser Asp Ser Asp Ser Asp Lys Ser Ser	140		145		150
Asp Asn Ser Gly Leu Lys Arg Lys Thr Pro Ala Leu Lys Met Ser	155		160		165
Val Ser Lys Arg Ala Arg Lys Ala Ser Ser Asp Leu Asp Gln Ala	170		175		180
Ser Val Ser Pro Ser Glu Glu Glu Asn Ser Glu Ser Ser Ser Glu	185		190		195
Ser Glu Lys Thr Ser Asp Gln Asp Phe Thr Pro Glu Lys Lys Ala	200		205		210
Ala Val Arg Ala Pro Arg Arg Gly Pro Leu Gly Gly Arg Lys Lys	215		220		225
Lys Lys Ala Pro Ser Ala Ser Asp Ser Asp Ser Lys Ala Asp Ser	230		235		240
Asp Gly Ala Lys Pro Glu Pro Val Ala Met Ala Arg Ser Ala Ser	245		250		255
Ser Ser Ser Ser Ser Ser Ser Ser Ser Asp Ser Asp Val Ser Val	260		265		270
Lys Lys Pro Pro Arg Gly Arg Lys Pro Ala Glu Lys Pro Leu Pro	275		280		285
Lys Pro Arg Gly Arg Lys Pro Lys Pro Glu Arg Pro Pro Ser Ser	290		295		300
Ser Ser Ser Asp Ser Asp Ser Asp Glu Val Asp Arg Ile Ser Glu	305		310		315
Trp Lys Arg Arg Asp Glu Ala Arg Arg Arg Glu Leu Glu Ala Arg					

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Cys	Gly	Ser	Ser	Glu	Asp	Leu	His	Asp	Ser	Val	Arg	Glu	Gly	Pro	
				635					640					645	
Asp	Leu	Asp	Arg	Pro	Gly	Ser	Asp	Arg	Gln	Glu	Arg	Glu	Arg	Ala	
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Arg	Gly	Asp	Ser	Glu	Ala	Leu	Asp	Glu	Glu	Ser					
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<210> 309
<211> 3871
<212> DNA
<213> Homo sapiens
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Gly	Ser	Thr	Ser	Asp	Lys	Thr	Ile	Leu	Ser	Arg	Val	Gly	Arg	Val			
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Cys	Lys	Asn	Asp	Val	Gly	Gly	Gln	Arg	Ser	Leu	Ile	Asn	Lys	Trp			
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Leu	Pro	Thr	Arg	Asp	Glu	Arg	Asn	Pro	Val	Val	Tyr	Gly	Val	Phe			
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Thr	Thr	Thr	Ser	Ser	Ile	Phe	Lys	Gly	Ser	Ala	Val	Cys	Val	Tyr			
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Ser	Met	Ala	Asp	Ile	Arg	Ala	Val	Phe	Asn	Gly	Pro	Tyr	Ala	His			
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Lys	Glu	Ser	Ala	Asp	His	Arg	Trp	Val	Gln	Tyr	Asp	Gly	Arg	Ile			
				380					385					390			
Pro	Tyr	Pro	Arg	Pro	Gly	Thr	Cys	Pro	Ser	Lys	Thr	Tyr	Asp	Pro			
				395					400					405			
Leu	Ile	Lys	Ser	Thr	Arg	Asp	Phe	Pro	Asp	Asp	Val	Ile	Ser	Phe			
				410					415					420			
Ile	Lys	Arg	His	Ser	Val	Met	Tyr	Lys	Ser	Val	Tyr	Pro	Val	Ala			
				425					430					435			
Gly	Gly	Pro	Thr	Phe	Lys	Arg	Ile	Asn	Val	Asp	Tyr	Arg	Leu	Thr			
				440					445					450			
Gln	Ile	Val	Val	Asp	His	Val	Ile	Ala	Glu	Asp	Gly	Gln	Tyr	Asp			
				455					460					465			
Val	Met	Phe	Leu	Gly	Thr	Asp	Ile	Gly	Thr	Val	Leu	Lys	Val	Val			
				470					475					480			
Ser	Ile	Ser	Lys	Glu	Lys	Trp	Asn	Met	Glu	Glu	Val	Val	Leu	Glu			
				485					490					495			
Glu	Leu	Gln	Ile	Phe	Lys	His	Ser	Ser	Ile	Ile	Leu	Asn	Met	Glu			
				500					505					510			
Leu	Ser	Leu	Lys	Gln	Gln	Gln	Leu	Tyr	Ile	Gly	Ser	Arg	Asp	Gly			

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Cys Ala Asp Cys Cys Leu Ala Arg Asp Pro Tyr Cys Ala Trp Asp		
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Gly Asn Ala Cys Ser Arg Tyr Ala Pro Thr Ser Lys Arg Arg Ala		
560	565	570
Arg Arg Gln Asp Val Lys Tyr Gly Asp Pro Ile Thr Gln Cys Trp		
575	580	585
Asp Ile Glu Asp Ser Ile Ser His Glu Thr Ala Asp Glu Lys Val		
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Ile Phe Gly Ile Glu Phe Asn Ser Thr Phe Leu Glu Cys Ile Pro		
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Lys Ser Gln Gln Ala Thr Ile Lys Trp Tyr Ile Gln Arg Ser Gly		
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Thr Glu Tyr Gly Leu Leu Ile Arg Ser Leu Gln Lys Lys Asp Ser		
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Gly Met Tyr Tyr Cys Lys Ala Gln Glu His Thr Phe Ile His Thr		
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Ile Val Lys Leu Thr Leu Asn Val Ile Glu Asn Glu Gln Met Glu		
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Asn Thr Gln Arg Ala Glu His Glu Glu Gly Gln Val Lys Asp Leu		
695	700	705
Leu Ala Glu Ser Arg Leu Arg Tyr Lys Asp Tyr Ile Gln Ile Leu		
710	715	720
Ser Ser Pro Asn Phe Ser Leu Asp Gln Tyr Cys Glu Gln Met Trp		
725	730	735
His Arg Glu Lys Arg Arg Gln Arg Asn Lys Gly Gly Pro Lys Trp		
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Lys His Met Gln Glu Met Lys Lys Lys Arg Asn Arg Arg His His		
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gcttctagtg tctgtagccc caggtaaggg agtgacttaa cctctctgga 550

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<211> 370

<212> PRT

<213> Homo sapiens

<400> 315

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Val	Phe	Pro	Pro	Thr	Pro	Val	Leu	Cys	Leu	Pro	Asn	Gln	Val	Leu
				20					25					30
Gln	Arg	Leu	Glu	Gln	Arg	Arg	Gln	Gln	Ala	Ser	Glu	Arg	Glu	Ala
				35					40					45
Pro	Ser	Ile	Glu	Gln	Arg	Leu	Gln	Glu	Val	Arg	Glu	Ser	Ile	Arg
				50					55					60
Arg	Ala	Gln	Val	Ser	Gln	Val	Lys	Gly	Ala	Ala	Arg	Leu	Ala	Leu
				65					70					75
Leu	Gln	Gly	Ala	Gly	Leu	Asp	Val	Glu	Arg	Trp	Leu	Lys	Pro	Ala
				80					85					90
Met	Thr	Gln	Ala	Gln	Asp	Glu	Val	Glu	Gln	Glu	Arg	Arg	Leu	Ser
				95					100					105
Glu	Ala	Arg	Leu	Ser	Gln	Arg	Asp	Leu	Ser	Pro	Thr	Ala	Glu	Asp
				110					115					120
Ala	Glu	Leu	Ser	Asp	Phe	Glu	Glu	Cys	Glu	Glu	Thr	Gly	Glu	Leu
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Phe	Glu	Glu	Pro	Ala	Pro	Gln	Ala	Leu	Ala	Thr	Arg	Ala	Leu	Pro
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<211> 4407
<212> DNA
<213> Homo sapiens
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gagtttgag aagccagacc cctgggcacc tctcccaagc ccaaggacta 250
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g c c a t g c c a t g t g c c a g a c c a a c a c t c g c c c t g g g c c g a t g g c a c a c c c 1900
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[illegible]

(The following information was obtained from the records of the Federal Bureau of Investigation, Department of Justice.)

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				260					265					270					
Ile	Leu	Gly	Ser	Gly	Glu	Glu	Gly	Pro	Gln	Val	Gly	Pro	Ser	Ala					
				275					280					285					
Ala	Gln	Thr	Leu	Arg	Ser	Phe	Cys	Ala	Trp	Gln	Arg	Gly	Leu	Asn					
				290					295					300					
Thr	Pro	Glu	Asp	Ser	Gly	Pro	Asp	His	Phe	Asp	Thr	Ala	Ile	Leu					
				305					310					315					
Phe	Thr	Arg	Gln	Asp	Leu	Cys	Gly	Val	Ser	Thr	Cys	Asp	Thr	Leu					
				320					325					330					
Gly	Met	Ala	Asp	Val	Gly	Thr	Val	Cys	Asp	Pro	Ala	Arg	Ser	Cys					
				335					340					345					
Ala	Ile	Val	Glu	Asp	Asp	Gly	Leu	Gln	Ser	Ala	Phe	Thr	Ala	Ala					
				350					355					360					
His	Glu	Leu	Gly	His	Val	Phe	Asn	Met	Leu	His	Asp	Asn	Ser	Lys					
				365					370					375					
Pro	Cys	Ile	Ser	Leu	Asn	Gly	Pro	Leu	Ser	Thr	Ser	Arg	His	Val					
				380					385					390					
Met	Ala	Pro	Val	Met	Ala	His	Val	Asp	Pro	Glu	Glu	Pro	Trp	Ser					
				395					400					405					
Pro	Cys	Ser	Ala	Arg	Phe	Ile	Thr	Asp	Phe	Leu	Asp	Asn	Gly	Tyr					
				410					415					420					
Gly	His	Cys	Leu	Leu	Asp	Lys	Pro	Glu	Ala	Pro	Leu	His	Leu	Pro					
				425					430					435					
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				440					445					450					
Leu	Thr	Phe	Gly	Pro	Asp	Ser	Arg	His	Cys	Pro	Gln	Leu	Pro	Pro					
				455					460					465					
Pro	Cys	Ala	Ala	Leu	Trp	Cys	Ser	Gly	His	Leu	Asn	Gly	His	Ala					
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Met	Cys	Gln	Thr	Lys	His	Ser	Pro	Trp	Ala	Asp	Gly	Thr	Pro	Cys					
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Gly	Pro	Ala	Gln	Ala	Cys	Met	Gly	Gly	Arg	Cys	Leu	His	Met	Asp					
				500					505					510					
Gln	Leu	Gln	Asp	Phe	Asn	Ile	Pro	Gln	Ala	Gly	Gly	Trp	Gly	Pro					
				515					520					525					
Trp	Gly	Pro	Trp	Gly	Asp	Cys	Ser	Arg	Thr	Cys	Gly	Gly	Gly	Val					

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Gln	Phe	Ser	Ser	Arg 545	Asp	Cys	Thr	Arg	Pro 550	Val	Pro	Arg	Asn	Gly 555			
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Thr	Glu	Asp	Cys	Pro 575	Thr	Gly	Ser	Ala	Leu 580	Thr	Phe	Arg	Glu	Glu 585			
Gln	Cys	Ala	Ala	Tyr 590	Asn	His	Arg	Thr	Asp 595	Leu	Phe	Lys	Ser	Phe 600			
Pro	Gly	Pro	Met	Asp 605	Trp	Val	Pro	Arg	Tyr 610	Thr	Gly	Val	Ala	Pro 615			
Gln	Asp	Gln	Cys	Lys 620	Leu	Thr	Cys	Gln	Ala 625	Arg	Ala	Leu	Gly	Tyr 630			
Tyr	Tyr	Val	Leu	Glu 635	Pro	Arg	Val	Val	Asp 640	Gly	Thr	Pro	Cys	Ser 645			
Pro	Asp	Ser	Ser	Ser 650	Val	Cys	Val	Gln	Gly 655	Arg	Cys	Ile	His	Ala 660			
Gly	Cys	Asp	Arg	Ile 665	Ile	Gly	Ser	Lys	Lys 670	Lys	Phe	Asp	Lys	Cys 675			
Met	Val	Cys	Gly	Gly 680	Asp	Gly	Ser	Gly	Cys 685	Ser	Lys	Gln	Ser	Gly 690			
Ser	Phe	Arg	Lys	Phe 695	Arg	Tyr	Gly	Tyr	Asn 700	Asn	Val	Val	Thr	Ile 705			
Pro	Ala	Gly	Ala	Thr 710	His	Ile	Leu	Val	Arg 715	Gln	Gln	Gly	Asn	Pro 720			
Gly	His	Arg	Ser	Ile 725	Tyr	Leu	Ala	Leu	Lys 730	Leu	Pro	Asp	Gly	Ser 735			
Tyr	Ala	Leu	Asn	Gly 740	Glu	Tyr	Thr	Leu	Met 745	Pro	Ser	Pro	Thr	Asp 750			
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Ala	Ala	Ser	Glu	Thr 770	Leu	Ser	Gly	His	Gly 775	Pro	Leu	Ala	Gln	Pro 780			
Leu	Thr	Leu	Gln	Val 785	Leu	Val	Ala	Gly	Asn 790	Pro	Gln	Asp	Thr	Arg 795			
Leu	Arg	Tyr	Ser	Phe 800	Phe	Val	Pro	Arg	Pro 805	Thr	Pro	Ser	Thr	Pro 810			
Arg	Pro	Thr	Pro	Gln	Asp	Trp	Leu	His	Arg	Arg	Ala	Gln	Ile	Leu			

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Glu	Ile	Leu	Arg	Arg	Arg	Pro	Trp	Ala	Gly	Arg	Lys								
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<212> DNA
<213> Artificial Sequence
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<220>
<223> Synthetic oligonucleotide probe

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<213> Artificial Sequence
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<220>
<223> Synthetic oligonucleotide probe

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<400> 319
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<223> Synthetic oligonucleotide probe

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<213> Homo sapiens
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<400> 321
cagcagtggt ctctcagtc tctcaaagca aggaaagagt actgtgtgct 50
gagagaccat ggcaaagaat cctccagaga attgtgaaga ctgtcacatt 100
ctaaatgcag aagcttttaa atccaagaaa atatgtaaat cacttaagat 150
ttgtggactg gtgttttgga tcttggccct aactctaatt gtctgtttt 200
gggggagcaa gcacttctgg cggaggtac caaaaaagc ctatgacatg 250
gagcacactt tctacagcaa tggagagaag aagaagattt acatggaaat 300
tgatcctgtg accagaactg aaatattcag aagcggaaat ggcactgatg 350
```


[illegible]

				80					85					90
Arg	Ser	Gly	Asn	Gly 95	Thr	Asp	Glu	Thr	Leu 100	Glu	Val	His	Asp	Phe 105
Lys	Asn	Gly	Tyr	Thr 110	Gly	Ile	Tyr	Phe	Val 115	Gly	Leu	Gln	Lys	Cys 120
Phe	Ile	Lys	Thr	Gln 125	Ile	Lys	Val	Ile	Pro 130	Glu	Phe	Ser	Glu	Pro 135
Glu	Glu	Glu	Ile	Asp 140	Glu	Asn	Glu	Glu	Ile 145	Thr	Thr	Thr	Phe	Phe 150
Glu	Gln	Ser	Val	Ile 155	Trp	Val	Pro	Ala	Glu 160	Lys	Pro	Ile	Glu	Asn 165
Arg	Asp	Phe	Leu	Lys 170	Asn	Ser	Lys	Ile	Leu 175	Glu	Ile	Cys	Asp	Asn 180
Val	Thr	Met	Tyr	Trp 185	Ile	Asn	Pro	Thr	Leu 190	Ile	Ser	Val	Ser	Glu 195
Leu	Gln	Asp	Phe	Glu 200	Glu	Glu	Gly	Glu	Asp 205	Leu	His	Phe	Pro	Ala 210
Asn	Glu	Lys	Lys	Gly 215	Ile	Glu	Gln	Asn	Glu 220	Gln	Trp	Val	Val	Pro 225
Gln	Val	Lys	Val	Glu 230	Lys	Thr	Arg	His	Ala 235	Arg	Gln	Ala	Ser	Glu 240
Glu	Glu	Leu	Pro	Ile 245	Asn	Asp	Tyr	Thr	Glu 250	Asn	Gly	Ile	Glu	Phe 255
Asp	Pro	Met	Leu	Asp 260	Glu	Arg	Gly	Tyr	Cys 265	Cys	Ile	Tyr	Cys	Arg 270
Arg	Gly	Asn	Arg	Tyr 275	Cys	Arg	Arg	Val	Cys 280	Glu	Pro	Leu	Leu	Gly 285
Tyr	Tyr	Pro	Tyr	Pro 290	Tyr	Cys	Tyr	Gln	Gly 295	Gly	Arg	Val	Ile	Cys 300
Arg	Val	Ile	Met	Pro 305	Cys	Asn	Trp	Trp	Val 310	Ala	Arg	Met	Leu	Gly 315

Arg Val

```
<210> 323
<211> 1174
<212> DNA
<213> Homo sapiens
```

<400> 323
gcggaactgg ctccggctgg cacctgagga gcggcgtgac cccgagggcc 50

```
<210> 324
<211> 239
<212> PRT
<213> Homo sapiens
```

```

<400> 324
Met Ala Ser Thr Ala Val Gln Leu Leu Gly Phe Leu Leu Ser Phe
  1             5             10             15
Leu Gly Met Val Gly Thr Leu Ile Thr Thr Ile Leu Pro His Trp

```

(The following information was obtained from the FBI files maintained at the New York City Office.)

				20					25					30	
Arg	Arg	Thr	Ala	His 35	Val	Gly	Thr	Asn	Ile 40	Leu	Thr	Ala	Val	Ser 45	
Tyr	Leu	Lys	Gly	Leu 50	Trp	Met	Glu	Cys	Val 55	Trp	His	Ser	Thr	Gly 60	
Ile	Tyr	Gln	Cys	Gln 65	Ile	Tyr	Arg	Ser	Leu 70	Leu	Ala	Leu	Pro	Gln 75	
Asp	Leu	Gln	Ala	Ala 80	Arg	Ala	Leu	Met	Val 85	Ile	Ser	Cys	Leu	Leu 90	
Ser	Gly	Ile	Ala	Cys 95	Ala	Cys	Ala	Val	Ile 100	Gly	Met	Lys	Cys	Thr 105	
Arg	Cys	Ala	Lys	Gly 110	Thr	Pro	Ala	Lys	Thr 115	Thr	Phe	Ala	Ile	Leu 120	
Gly	Gly	Thr	Leu	Phe 125	Ile	Leu	Ala	Gly	Leu 130	Leu	Cys	Met	Val	Ala 135	
Val	Ser	Trp	Thr	Thr 140	Asn	Asp	Val	Val	Gln 145	Asn	Phe	Tyr	Asn	Pro 150	
Leu	Leu	Pro	Ser	Gly 155	Met	Lys	Phe	Glu	Ile 160	Gly	Gln	Ala	Leu	Tyr 165	
Leu	Gly	Phe	Ile	Ser 170	Ser	Ser	Leu	Ser	Leu 175	Ile	Gly	Gly	Thr	Leu 180	
Leu	Cys	Leu	Ser	Cys 185	Gln	Asp	Glu	Ala	Pro 190	Tyr	Arg	Pro	Tyr	Gln 195	
Ala	Pro	Pro	Arg	Ala 200	Thr	Thr	Thr	Thr	Ala 205	Asn	Thr	Ala	Pro	Ala 210	
Tyr	Gln	Pro	Pro	Ala 215	Ala	Tyr	Lys	Asp	Asn 220	Arg	Ala	Pro	Ser	Val 225	
Thr	Ser	Ala	Thr	His 230	Ser	Gly	Tyr	Arg	Leu 235	Asn	Asp	Tyr	Val		

```
<210> 325
<211> 2121
<212> DNA
<213> Homo sapiens
```

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<400> 325
gagctcccct caggagcgcg ttagcttcac accttcggca gcaggagggc 50
ggcagcttct cgcaggcggc agggcgggcg gccaggatca tgtccaccac 100
cacatgccaa gtggtggcgt tcctcctgtc catcctgggg ctggccggct 150
gcacgcgcgc caccgggatg gacatgtgga gcaccagga cctgtacgac 200
```

aaccocgtca cctccgtggt ccagtaacgaa gggctctgga ggagctgcgt 250
gaggcagagt tcaggcttca ccgaatgcag gccctatttc accatcctgg 300
gacttccagc catgctgcag gcagtgcgag ccctgatgat cgtaggcata 350
gtcctgggtg ccattggcct cctggatatc atctttgccc tgaaatgcat 400
ccgcattggc agcatggagg actctgccaa agccaacatg aactgacct 450
ccgggatcat gttcattgtc tcaggctctt gtgcaattgc tggagtgtct 500
gtgtttgcca acatgctggt gactaacttc tggatgtcca cagctaacat 550
gtacaccggc atgggtggga tggcgcagac tgttcagacc aggtacacat 600
ttggtgcggc tctgttcgtg ggctgggtcg ctggaggcct cacactaatt 650
gggggtgtga tgatgtgcat cgcctgccgg ggctggcac cagaagaaac 700
caactacaaa gccgtttctt atcatgcctc aggccacagt gttgcctaca 750
agcctggagg cttcaaggcc agcactggct ttgggtccaa caccaaaaac 800
aagaagatat acgatggagg tgcccgacaca gaggacgagg tacaatctta 850
tccttccaag cagcactatg tgtaatgctc taagacctct cagcacgggc 900
ggaagaaact cccggagagc tcacccaaaa aacaaggaga tcccatctag 950
atttcttctt gcttttgact cacagctgga agttagaaaa gcctcgattt 1000
catctttgga gaggccaaat ggtcttagcc tcagtctctg tctctaaata 1050
ttccaccata aaacagctga gttatttatg aattagaggc tatagctcac 1100
atcttcaatc ctctatttct ttttttaaata ataactttct actctgatga 1150
gagaatgtgg ttttaatctc tctctcacat tttgatgatt tagacagaat 1200
ccccctcttc ctctagtca ataaacccat tgatgatcta tttcccagct 1250
tatccccaag aaaacttttg aaaggaaaga gtagacccaa agatgttatt 1300
ttctgctggt tgaattttgt ctccccaccc ccaacttggc tagtaataaa 1350
cacttactga agaagaagca ataagagaaa gatatttgta atctctccag 1400
cccatgatct cggttttctt aactgtgat cttaaaagtt accaaaccaa 1450
agtcattttc agtttgaggc aaccaaactt ttctactgct gttgacatct 1500
tcttattaca gcaacacat tctaggagt tctgagctc tccactggag 1550
tcctctttct gtcgcggtgc agaaattgtc cctagatgaa tgagaaaatt 1600

atttttttta atttaagtcc taaatatagt taaaataaat aatgttttag 1650
 taaaatgata cactatctct gtgaaatagc ctcacccta catgtggata 1700
 gaaggaaatg aaaaaataat tgctttgaca ttgtctatat ggtactttgt 1750
 aaagtcatgc ttaagtacaa attccatgaa aagctcacac ctgtaatcct 1800
 agcactttgg gaggctgagg aggaaggatc acttgagccc agaagttcga 1850
 gactagcctg ggcaacatgg agaagccctg tctctacaaa atacagagag 1900
 aaaaaatcag ccagtcatgg tggcatacac ctgtagtccc agcattccgg 1950
 gaggctgagg tgggaggatc acttgagccc agggagggttg gggctgcagt 2000
 gagccatgat cacaccactg cactccagcc aggtgacata gcgagatcct 2050
 gtctaaaaaa ataaaaaata aataatggaa cacagcaagt cctaggaagt 2100
 aggttaaaac taattcttta a 2121

<210> 326

<211> 261

<212> PRT

<213> Homo sapiens

<400> 326

Met	Ser	Thr	Thr	Thr	Cys	Gln	Val	Val	Ala	Phe	Leu	Leu	Ser	Ile
1				5					10					15
Leu	Gly	Leu	Ala	Gly	Cys	Ile	Ala	Ala	Thr	Gly	Met	Asp	Met	Trp
				20					25					30
Ser	Thr	Gln	Asp	Leu	Tyr	Asp	Asn	Pro	Val	Thr	Ser	Val	Phe	Gln
				35					40					45
Tyr	Glu	Gly	Leu	Trp	Arg	Ser	Cys	Val	Arg	Gln	Ser	Ser	Gly	Phe
				50					55					60
Thr	Glu	Cys	Arg	Pro	Tyr	Phe	Thr	Ile	Leu	Gly	Leu	Pro	Ala	Met
				65					70					75
Leu	Gln	Ala	Val	Arg	Ala	Leu	Met	Ile	Val	Gly	Ile	Val	Leu	Gly
				80					85					90
Ala	Ile	Gly	Leu	Leu	Val	Ser	Ile	Phe	Ala	Leu	Lys	Cys	Ile	Arg
				95					100					105
Ile	Gly	Ser	Met	Glu	Asp	Ser	Ala	Lys	Ala	Asn	Met	Thr	Leu	Thr
				110					115					120
Ser	Gly	Ile	Met	Phe	Ile	Val	Ser	Gly	Leu	Cys	Ala	Ile	Ala	Gly
				125					130					135
Val	Ser	Val	Phe	Ala	Asn	Met	Leu	Val	Thr	Asn	Phe	Trp	Met	Ser
				140					145					150

;

[illegible]

```
<210> 327
<211> 2010
<212> DNA
<213> Homo sapiens
```

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<400> 327
ggaaaaaactg ttctcttctg tggcacagag aaccctgctt caaagcagaa 50
gtagcagttc cggagtccag ctggctaaaa ctcatcccag aggataatgg 100
caaccctatgc cttagaaatc gctgggctgt ttcttggtgg tgttggaatg 150
gtgggcacag tggctgtcac tgtcatgcct cagtggagag tgtcggcctt 200
cattgaaaac aacatcgtgg tttttgaaaa cttctgggaa ggactgtgga 250
tgaattgcgt gaggcaggct aacatcagga tgcagtgcaa aatctatgat 300
tccctgctgg ctcttttctcc ggacctacag gcagccagag gactgatgtg 350
tgctgcttcc gtgatgtcct tcttggcttt catgatggcc atccttggca 400
tgaaatgcac caggtgcacg ggggacaatg agaaggtgaa ggctcacatt 450
ctgctgacgg ctggaatcat cttcatcatc acgggcatgg tgggtgctcat 500
ccctgtgagc tgggttgcca atgccatcat cagagatttc tataactcaa 550
tagtgaatgt tgcccaaaaa cgtgagcttg gagaagctct ctacttagga 600
tggaaccagg cactgggtgt gattgttggg ggagctctgt tctgctgcgt 650
```

tttttgttgc aacgaaaaga gcagtagcta cagatactcg ataccttccc 700
 atcgcacaaac ccaaaaaagt tatcacaccg gaaagaaagtc accgagcgtc 750
 tactccagaa gtcagtatgt gtagttgtgt atgttttttt aactttacta 800
 taaagccatg caaatgacaa aaatctatat tacttttctca aaatggaccc 850
 caaagaaact ttgattttact gttcttaact gcctaattctt aattacagga 900
 actgtgcata agctattttat gattctataa gctattttcag cagaatgaga 950
 tattaaaccc aatgctttga ttgttctaga aagtatagta atttgttttc 1000
 taaggtgggt caagcatcta ctctttttat cattttacttc aaaatgacat 1050
 tgctaaagac tgcattatct tactactgta atttctccac gacatagcat 1100
 tatgtacata gatgagtgtg acattttatat ctccacataga gacatgctta 1150
 tatgggtttta tttaaaatga aatgccagtc cattacactg aataaataga 1200
 actcaactat tgctttttcag ggaaatcatg gataggggtg aagaagggtta 1250
 ctattaattg tttaaaaaca gcttagggat taatgtctct cattttataat 1300
 gaagattaaa atgaaggctt taatcagcat tgtaaaggaa attgaatggc 1350
 tttctgatat gctgtttttt agcctaggag ttagaaatcc taacttcttt 1400
 atcctcttct cccagaggct ttttttttct tgtgtattaa attaacattt 1450
 ttaaaacgca gatattttgt caaggggctt tgcattcaaa ctgcttttcc 1500
 agggctatac tcagaagaaa gataaaagtg tgatctaaga aaaagtgatg 1550
 gttttaggaa agtgaaaata tttttgtttt tgtatttgaa gaagaatgat 1600
 gcattttgac aagaaatcat atatgtatgg atatatttta ataagtattt 1650
 gagtacagac ttgaggtttt catcaatata aataaaagag cagaaaaata 1700
 tgtcttggtt ttcatctgct taccaaaaaa acaacaacaa aaaaagttgt 1750
 cctttgagaa cttcacctgc tcctatgtgg gtacctgagt caaaattgtc 1800
 atttttgttc tgtgaaaaat aaatttcctt cttgtaccat ttctgttttag 1850
 ttttactaaa atctgtaaat actgtatttt tctgtttatt ccaaatttga 1900
 tgaaactgac aatccaattt gaaagtttgt gtcgacgtct gtctagctta 1950
 aatgaatgtg ttctatttgc tttatacatt tatattaata aattgtacat 2000
 ttttctaatt 2010

[illegible]

<400> 328

Met 1	Ala	Thr	His	Ala 5	Leu	Glu	Ile	Ala	Gly 10	Leu	Phe	Leu	Gly	Gly 15
Val	Gly	Met	Val	Gly 20	Thr	Val	Ala	Val	Thr 25	Val	Met	Pro	Gln	Trp 30
Arg	Val	Ser	Ala	Phe 35	Ile	Glu	Asn	Asn	Ile 40	Val	Val	Phe	Glu	Asn 45
Phe	Trp	Glu	Gly	Leu 50	Trp	Met	Asn	Cys	Val 55	Arg	Gln	Ala	Asn	Ile 60
Arg	Met	Gln	Cys	Lys 65	Ile	Tyr	Asp	Ser	Leu 70	Leu	Ala	Leu	Ser	Pro 75
Asp	Leu	Gln	Ala	Ala 80	Arg	Gly	Leu	Met	Cys 85	Ala	Ala	Ser	Val	Met 90
Ser	Phe	Leu	Ala	Phe 95	Met	Met	Ala	Ile	Leu 100	Gly	Met	Lys	Cys	Thr 105
Arg	Cys	Thr	Gly	Asp 110	Asn	Glu	Lys	Val	Lys 115	Ala	His	Ile	Leu	Leu 120
Thr	Ala	Gly	Ile	Ile 125	Phe	Ile	Ile	Thr	Gly 130	Met	Val	Val	Leu	Ile 135
Pro	Val	Ser	Trp	Val 140	Ala	Asn	Ala	Ile	Ile 145	Arg	Asp	Phe	Tyr	Asn 150
Ser	Ile	Val	Asn	Val 155	Ala	Gln	Lys	Arg	Glu 160	Leu	Gly	Glu	Ala	Leu 165
Tyr	Leu	Gly	Trp	Thr 170	Thr	Ala	Leu	Val	Leu 175	Ile	Val	Gly	Gly	Ala 180
Leu	Phe	Cys	Cys	Val 185	Phe	Cys	Cys	Asn	Glu 190	Lys	Ser	Ser	Ser	Tyr 195
Arg	Tyr	Ser	Ile	Pro 200	Ser	His	Arg	Thr	Thr 205	Gln	Lys	Ser	Tyr	His 210
Thr	Gly	Lys	Lys	Ser 215	Pro	Ser	Val	Tyr	Ser 220	Arg	Ser	Gln	Tyr	Val 225

<210> 329

<211> 1315

<212> DNA

<213> Homo sapiens

<400> 329

tcgccatggc ctctgccgga atgcagatcc tgggagtcgt cctgacactg 50

ctgggctggg tgaatggcct ggtctcctgt gccctgccca tgtggaaggt 100
gaccgctttc atcggcaaca gcacgtgggt ggcccagggtg gtgtgggagg 150
gcctgtggat gtccctgcgtg gtgcagagca ccggccagat gcagtgaag 200
gtgtacgact cactgctggc gctgccacag gacctgcagg ctgcacgtgc 250
cctctgtgtc atcgccctcc ttgtggccct gttcggcttg ctgggtctacc 300
ttgtctggggc caagtgtacc acctgtgtgg aggagaagga ttccaaggcc 350
cgctgtgtgc tcacctctgg gattgtcttt gtcactctcag gggtcctgac 400
gctaataccc gtgtgctgga cggcgcacgc catcatccgg gacttctata 450
acccctgggt ggctgaggcc caaaagcggg agctgggggc ctccctctac 500
ttgggctggg cggcctcagg ccttttgttg ctgggtgggg ggttgctgtg 550
ctgcacttgc ccctcggggg ggtcccaggg cccagccat tacatggccc 600
gctactcaac atctgccct gccatctctc gggggccctc tgagtaccct 650
accaagaatt acgtctgacg tggaggggaa tgggggctcc gctggcgcta 700
gagccatcca gaagtggcag tgcccaacag ctttgggatg ggttcgtacc 750
ttttgtttct gcctcctgct atttttcttt tgactgagga tatttaaaat 800
tcatttgaaa actgagccaa ggtgttgact cagactctca cttaggctct 850
gctgtttctc acccttgat gatggagcca aagaggggat gctttgagat 900
tctggatctt gacatgccca tcttagaagc cagtcaagct atggaactaa 950
tgcgagggt gcttgctgtg ctggctttgc aacaagacag actgtcccca 1000
agagttcctg ctgctgctgg gggctgggct tccctagatg tcaactggaca 1050
gctgcccccc atcctactca ggtctctgga gtcctctct tcaacctggt 1100
aaaaacaaat catctgttaa caaaggactg cccacctccg gaacttctga 1150
cctctgtttc ctccgtcctg ataagacgtc cccccccag ggccagggtc 1200
cagctatgta gacccccgcc cccacctcca aactgcacc cttctgccct 1250
gccccctcg tctaccccc tttaactca catttttctc aaataaagca 1300
tgttttgtta gtgca 1315

<210> 330
<211> 220
<212> PRT
<213> Homo sapiens

<400> 330

Met	Ala	Ser	Ala	Gly	Met	Gln	Ile	Leu	Gly	Val	Val	Leu	Thr	Leu
1				5					10					15
Leu	Gly	Trp	Val	Asn	Gly	Leu	Val	Ser	Cys	Ala	Leu	Pro	Met	Trp
				20					25					30
Lys	Val	Thr	Ala	Phe	Ile	Gly	Asn	Ser	Ile	Val	Val	Ala	Gln	Val
				35					40					45
Val	Trp	Glu	Gly	Leu	Trp	Met	Ser	Cys	Val	Val	Gln	Ser	Thr	Gly
				50					55					60
Gln	Met	Gln	Cys	Lys	Val	Tyr	Asp	Ser	Leu	Leu	Ala	Leu	Pro	Gln
				65					70					75
Asp	Leu	Gln	Ala	Ala	Arg	Ala	Leu	Cys	Val	Ile	Ala	Leu	Leu	Val
				80					85					90
Ala	Leu	Phe	Gly	Leu	Leu	Val	Tyr	Leu	Ala	Gly	Ala	Lys	Cys	Thr
				95					100					105
Thr	Cys	Val	Glu	Glu	Lys	Asp	Ser	Lys	Ala	Arg	Leu	Val	Leu	Thr
				110					115					120
Ser	Gly	Ile	Val	Phe	Val	Ile	Ser	Gly	Val	Leu	Thr	Leu	Ile	Pro
				125					130					135
Val	Cys	Trp	Thr	Ala	His	Ala	Ile	Ile	Arg	Asp	Phe	Tyr	Asn	Pro
				140					145					150
Leu	Val	Ala	Glu	Ala	Gln	Lys	Arg	Glu	Leu	Gly	Ala	Ser	Leu	Tyr
				155					160					165
Leu	Gly	Trp	Ala	Ala	Ser	Gly	Leu	Leu	Leu	Leu	Gly	Gly	Gly	Leu
				170					175					180
Leu	Cys	Cys	Thr	Cys	Pro	Ser	Gly	Gly	Ser	Gln	Gly	Pro	Ser	His
				185					190					195
Tyr	Met	Ala	Arg	Tyr	Ser	Thr	Ser	Ala	Pro	Ala	Ile	Ser	Arg	Gly
				200					205					210
Pro	Ser	Glu	Tyr	Pro	Thr	Lys	Asn	Tyr	Val					
				215					220					

<210> 331

<211> 1160

<212> DNA

<213> Homo sapiens

<400> 331

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ttctacatct tgagcatctt ctaccactcc gaattgaacc agtcttcaaa 100

	35		40		45
Ile Gly Ile Cys Gly Met Lys Gln Val Gln Cys Thr Gly Ser Asn	50		55		60
Glu Arg Ala Lys Ala Tyr Leu Leu Gly Thr Ser Gly Val Leu Phe	65		70		75
Ile Leu Thr Gly Ile Phe Val Leu Ile Pro Val Ser Trp Thr Ala	80		85		90
Asn Ile Ile Ile Arg Asp Phe Tyr Asn Pro Ala Ile His Ile Gly	95		100		105
Gln Lys Arg Glu Leu Gly Ala Ala Leu Phe Leu Gly Trp Ala Ser	110		115		120
Ala Ala Val Leu Phe Ile Gly Gly Gly Leu Leu Cys Gly Phe Cys	125		130		135
Cys Cys Asn Arg Lys Lys Gln Gly Tyr Arg Tyr Pro Val Pro Gly	140		145		150
Tyr Arg Val Pro His Thr Asp Lys Arg Arg Asn Thr Thr Met Leu	155		160		165
Ser Lys Thr Ser Thr Ser Tyr Val	170				

<210> 333

<211> 535

<212> DNA

<213> Homo sapiens

<400> 333

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agtgacaatc tcagagcagc ttctacacca cagccatttc cagcatgaag 50
atcactgggg gtctccttct gctctgtaca gtggtctatt tctgtagcag 100
ctcagaagct gctagtctgt ctccaaaaaa agtggactgc agcatttaca 150
agaagtatcc agtgggtggcc atcccctgcc ccatcacata cctaccagtt 200
tgtgggttctg actacatcac ctatgggaat gaatgtcact tgtgtaccga 250
gagcttgaaa agtaatggaa gagttcagtt tcttcacgat ggaagttgct 300
aaattctcca tggacataga gagaaaggaa tgatattctc atcatcatct 350
tcatcatccc aggtctctgac tgagtttctt tcagttttac tgatgttctg 400
ggtagggggac agagccagat tcagagtaat cttgactgaa tggagaaagt 450
ttctgtgcta cccctacaaa cccatgcctc actgacagac cagcattttt 500
ttttaaacac gtcaataaaa aaataatctc ccaga 535

```

[Faint, illegible markings]

```
<210> 335
<211> 742
<212> DNA
<213> Homo sapiens
```

```

<400> 335
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ctgctcgcgc cccgcgcgcca tggetgcctc ccccgcgcg g cctgctgtcc 100
tggccctgac cgggctggcg ctgctcctgc tcctgtgctg gggcccaggt 150
ggcataagtg gaaataaaact caagctgatg cttcaaaaac gagaagcacc 200
tgttccaact aagactaaag tggccgttga tgagaataaa gccaaagaat 250
tccttggcag cctgaagcgc cagaagcggc agctgtggga ccggactcgg 300
cccgaggtgc agcagtggta ccagcagttt ctctacatgg gctttgatga 350
agcgaaattt gaagatgaca tcacctattg gcttaacaga gatcgaaatg 400
gacatgaata ctatggcgat tactaccaac gtcactatga tgaagactct 450
gcaattggtc cccggagccc ctacggcttt aggcattggag ccagcgtcaa 500
ctacgatgac tactaaccat gacttgccac acgctgtaca agaagcaaat 550
agcgattctc ttcattgtat tcctaattgcc ttacactact tggtttctga 600
tttgctctat ttcagcagat cttttctacc tactttgtgt gatcaaaaaa 650
gaagagttaa aacaacacat gtaaattgcct tttgatattt catgggaatg 700

```

$\frac{1}{\sqrt{2}} \begin{pmatrix} 1 & i \\ 0 & 1 \end{pmatrix} \begin{pmatrix} 1 & -i \\ 0 & 1 \end{pmatrix} = \frac{1}{2} \begin{pmatrix} 1-i & 1+i \\ 0 & 2 \end{pmatrix} = \begin{pmatrix} \frac{1-i}{2} & \frac{1+i}{2} \\ 0 & 1 \end{pmatrix}$

1

‘

1

```
<400> 337
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tgaaggggtg ggtgatgagg tgacctcct tttctcgggtg cttgcctgcc 150
ttctgggtgct ggcccttgcc tgggtctcaa cgcacaccgc tgagggcggg 200
gacccaactgc ccagccgctc agggaccca acgcatccc agcccagcgc 250
agccatggca gctaccgaca gcatgagagg ggaggcccca ggggcagaga 300
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cccccagcct gagacacaga ggtcaagctg cacagccaga gccagcacg 350
 gggttcacag caacaccgcc agccccggac tccccgcagg agcccctcgt 400
 gctacggctg aaattcctca atgattcaga gcaggtggcc agggcctggc 450
 cccacgacac cattgggtcc ttgaaaagga cccagtttcc cggccgggaa 500
 cagcaggtgc gactcatcta ccaagggcag ctgctaggcg acgacacca 550
 gaccctgggc agccttcacc tccctcccaa ctgcgttctc cactgccacg 600
 tgtccacgag agtcgggtccc ccaaattccc cctgcccgcc ggggtccgag 650
 cccggccccct cggggctgga aatcggcagc ctgctgctgc ccctgctgct 700
 cctgctgttg ctgctgctct ggtactgcca gatccagtac cggcccttct 750
 tccccctgac cgccactctg ggcttggccg gcttcaccct gtcctcagt 800
 ctcttggcct ttgccatgta ccgcccgtag tgcctccgcg ggcgcttggc 850
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 tgcgaccgcc ggggctcggg gccacctccc ggggctgctg aacctcagcc 1050
 cgcactggga gtgggtcct cggggtcggg catctgctgt cgctgcctcg 1100
 gccccgggca gagccgggcc gccccggggg ccctcttag tgttctgccg 1150
 gaggaccag ccgcctccaa tccctgacag ctcttgggc tgagttgggg 1200
 acgccaggtc ggtgggagc tgggaaggg gagcggggag gggcagagga 1250
 gttccccgga acccgtgcag attaaagtaa ctgtgaagtt ttaaaaaaaaa 1300
 aaaaaaaaaa 1310

<210> 338
 <211> 246
 <212> PRT
 <213> Homo sapiens

<400> 338
 Met Thr Leu Ile Glu Gly Val Gly Asp Glu Val Thr Val Leu Phe
 1 5 10 15
 Ser Val Leu Ala Cys Leu Leu Val Leu Ala Leu Ala Trp Val Ser
 20 25 30
 Thr His Thr Ala Glu Gly Gly Asp Pro Leu Pro Gln Pro Ser Gly
 35 40 45

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<210> 339
<211> 849
<212> DNA
<213> Homo sapiens
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```
<400> 339
gagattggaa acagccaggt tggagcagtg agtgagtaag gaaacctggc 50
tgccctctcc agattcccca ggctctcaga gaagatcagc agaaagtctg 100
caagacccta agaaccatca gccctcagct gcacctctc cctccaagg 150
atgacaaaagg cgctactcat ctatttggtc agcagctttc ttgccctaaa 200
tcaggccagc ctcatcagtc gctgtgactt ggcccaggtg ctgcagctgg 250
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Arg Pro Leu Ser Tyr Trp Leu Thr Gly Cys Arg Leu Arg
140 145

<210> 341
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 341
ccctccaagg atgacaaagg cgc 23

<210> 342
<211> 29
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 342
ggtcagcagc tttcttgccc taaatcagg 29

<210> 343
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 343
atctcaggcg gcatcctgtc agcc 24

<210> 344
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 344
gtggatgcct gcaagaaggt tggg 24

<210> 345
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 345

agctttcttg ccctaaatca ggccagcctc atcagtcgct gtgac 45

<210> 346

<211> 2575

<212> DNA

<213> Homo sapiens

<400> 346

tctgacctga ctggaagcgt ccaaagaggg acggctgtca gccctgcttg 50
 actgagaacc caccagctca tcccagacac ctcatagcaa cctatttata 100
 caaaggggga aagaaacacc tgagcagaat ggaatcatta tttttttccc 150
 aaggagaaaa cgggggtaaa gggagggag caattcaatt tgaagtccct 200
 gtgaatgggc tttcagaagg caattaaaga aatccactca gagaggactt 250
 ggggtgaaac ttgggtcctg tggttttctg attgtaagtg gaagcaggtc 300
 ttgcacacgc tggttgcaaa tgtcaggacc aggttaagtg actggcagaa 350
 aaacttccag gtggaacaag caacccatgt tctgctgcaa gcttgaagga 400
 gcctggagcg ggagaaagct aacttgaaca tgacctgttg catttgga 450
 gttctagcaa catgctccta aggaagcgat acaggcacag accatgcaga 500
 ctccagttcc tctgctgct cctgatgctg ggatgctcc tgatgatgg 550
 ggcgatgttg caccctcccc accacaccct gcaccagact gtcacagccc 600
 aagccagcaa gcacagccct gaagccaggt accgcctgga ctttggggaa 650
 tcccaggatt ggggtactgga agctgaggat gaggggtgaag agtacagccc 700
 tctggagggc ctgccaccct ttatctcact gcgggaggat cagctgctgg 750
 tggccgtggc cttaccccag gccagaagga accagagcca gggcaggaga 800
 ggtgggagct accgcctcat caagcagcca aggaggcagg ataaggaagc 850
 cccaaagagg gactgggggg ctgatgagga cggggaggtg tctgaagaag 900
 aggagttgac cccgttcagc ctggaccac gtggcctcca ggaggcactc 950
 agtgcccgca tccccctcca gagggctctg cccgagggtc ggcaccact 1000
 gtgtctgcag cagcaccctc aggacagcct gccacagcc agcgtcatcc 1050
 tctgtttcca tgatgaggcc tggteactc tctgctggac tgtacacagc 1100
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 cgacctcagc cagcaaggac aactcaagtc tgctctcagc gaatatgtgg 1200
 ccaggctgga ggggggtgaag ttactcagga gcaacaagag gctgggtgcc 1250

atcaggggccc	ggatgctggy	ggccaccaga	gccaccgggy	atgtgctcgt	1300
cttcatggat	gcccactgcy	agtgccaccc	aggetggyctg	gagccctcc	1350
tcagcagaat	agctggtgac	aggagccgag	tggtatctcc	ggtgatagat	1400
gtgattgact	ggaagacttt	ccagtattac	ccctcaaagg	acctgcagcy	1450
tggggtgttg	gactggaagc	tggatttcca	ctgggaacct	ttgccagagc	1500
atgtgaggaa	ggccctccag	tccccataa	gccccatcag	gagccctgtg	1550
gtgcccggag	aggtggtggc	catggacaga	cattacttcc	aaaacactgg	1600
agcgtatgac	tctcttatgt	cgctgcyagg	tggtgaaaac	ctcgaactgt	1650
ctttcaaggc	ctggctctgt	ggtggctctg	ttgaaatcct	tcctgctct	1700
cgggtaggac	acatctacca	aatcaggat	tccattccc	ccctcgacca	1750
ggaggccacc	ctgaggaaca	gggttcgcat	tgctgagacc	tggtgggggt	1800
cattcaaaga	aaccttctac	aagcatagcc	cagaggcctt	ctccttgagc	1850
aaggctgaga	agccagactg	catggaacgc	ttgcagctgc	aaaggagact	1900
gggttgctcg	acattccact	ggtttctggc	taatgtctac	cctgagctgt	1950
acccatctga	acccaggccc	agtttctctg	gaaagctcca	caacactgga	2000
cttgggctct	gtgcagactg	ccaggcagaa	ggggacatcc	tggtgctgcc	2050
catggtgttg	gctccttgca	gtgacagccg	gcagcaacag	tacctgcagc	2100
acaccagcag	gaaggagatt	cactttggca	gccacagca	cctgtgcttt	2150
gctgtcaggc	aggagcaggt	gattcttcag	aactgcacgg	aggaaggcct	2200
ggccatccac	cagcagcact	gggacttcca	ggagaatggg	atgattgtcc	2250
acattctttc	tgggaaatgc	atggaagctg	tggtgcaaga	aaacaataaa	2300
gatttgtagc	tgcgtccgtg	tgatggaaaa	gcccgcagc	agtggcgatt	2350
tgaccagata	aatgctgtgg	atgaacgatg	aatgtcaatg	tcagaaggaa	2400
aagagaattt	tggccatcaa	aatccagctc	caagtgaacg	taaagagctt	2450
atatatttca	tgaagctgat	ccttttgtgt	gtgtgctcct	tgtgttagga	2500
gagaaaaaag	ctctatgaaa	gaatatagga	agtttctcct	tttcacacct	2550
tatttcattg	actgctggct	gctta	2575		

<210> 347

<211> 639

<212> PRT

<213> Homo sapiens

<400> 347

Met	Leu	Leu	Arg	Lys	Arg	Tyr	Arg	His	Arg	Pro	Cys	Arg	Leu	Gln	1	5	10	15
Phe	Leu	Leu	Leu	Leu	Leu	Met	Leu	Gly	Cys	Val	Leu	Met	Met	Val	20	25	30	
Ala	Met	Leu	His	Pro	Pro	His	His	Thr	Leu	His	Gln	Thr	Val	Thr	35	40	45	
Ala	Gln	Ala	Ser	Lys	His	Ser	Pro	Glu	Ala	Arg	Tyr	Arg	Leu	Asp	50	55	60	
Phe	Gly	Glu	Ser	Gln	Asp	Trp	Val	Leu	Glu	Ala	Glu	Asp	Glu	Gly	65	70	75	
Glu	Glu	Tyr	Ser	Pro	Leu	Glu	Gly	Leu	Pro	Pro	Phe	Ile	Ser	Leu	80	85	90	
Arg	Glu	Asp	Gln	Leu	Leu	Val	Ala	Val	Ala	Leu	Pro	Gln	Ala	Arg	95	100	105	
Arg	Asn	Gln	Ser	Gln	Gly	Arg	Arg	Gly	Gly	Ser	Tyr	Arg	Leu	Ile	110	115	120	
Lys	Gln	Pro	Arg	Arg	Gln	Asp	Lys	Glu	Ala	Pro	Lys	Arg	Asp	Trp	125	130	135	
Gly	Ala	Asp	Glu	Asp	Gly	Glu	Val	Ser	Glu	Glu	Glu	Glu	Leu	Thr	140	145	150	
Pro	Phe	Ser	Leu	Asp	Pro	Arg	Gly	Leu	Gln	Glu	Ala	Leu	Ser	Ala	155	160	165	
Arg	Ile	Pro	Leu	Gln	Arg	Ala	Leu	Pro	Glu	Val	Arg	His	Pro	Leu	170	175	180	
Cys	Leu	Gln	Gln	His	Pro	Gln	Asp	Ser	Leu	Pro	Thr	Ala	Ser	Val	185	190	195	
Ile	Leu	Cys	Phe	His	Asp	Glu	Ala	Trp	Ser	Thr	Leu	Leu	Arg	Thr	200	205	210	
Val	His	Ser	Ile	Leu	Asp	Thr	Val	Pro	Arg	Ala	Phe	Leu	Lys	Glu	215	220	225	
Ile	Ile	Leu	Val	Asp	Asp	Leu	Ser	Gln	Gln	Gly	Gln	Leu	Lys	Ser	230	235	240	
Ala	Leu	Ser	Glu	Tyr	Val	Ala	Arg	Leu	Glu	Gly	Val	Lys	Leu	Leu	245	250	255	
Arg	Ser	Asn	Lys	Arg	Leu	Gly	Ala	Ile	Arg	Ala	Arg	Met	Leu	Gly	260	265	270	

Ala Thr Arg Ala Thr Gly Asp Val Leu Val Phe Met Asp Ala His	275	280	285
Cys Glu Cys His Pro Gly Trp Leu Glu Pro Leu Leu Ser Arg Ile	290	295	300
Ala Gly Asp Arg Ser Arg Val Val Ser Pro Val Ile Asp Val Ile	305	310	315
Asp Trp Lys Thr Phe Gln Tyr Tyr Pro Ser Lys Asp Leu Gln Arg	320	325	330
Gly Val Leu Asp Trp Lys Leu Asp Phe His Trp Glu Pro Leu Pro	335	340	345
Glu His Val Arg Lys Ala Leu Gln Ser Pro Ile Ser Pro Ile Arg	350	355	360
Ser Pro Val Val Pro Gly Glu Val Val Ala Met Asp Arg His Tyr	365	370	375
Phe Gln Asn Thr Gly Ala Tyr Asp Ser Leu Met Ser Leu Arg Gly	380	385	390
Gly Glu Asn Leu Glu Leu Ser Phe Lys Ala Trp Leu Cys Gly Gly	395	400	405
Ser Val Glu Ile Leu Pro Cys Ser Arg Val Gly His Ile Tyr Gln	410	415	420
Asn Gln Asp Ser His Ser Pro Leu Asp Gln Glu Ala Thr Leu Arg	425	430	435
Asn Arg Val Arg Ile Ala Glu Thr Trp Leu Gly Ser Phe Lys Glu	440	445	450
Thr Phe Tyr Lys His Ser Pro Glu Ala Phe Ser Leu Ser Lys Ala	455	460	465
Glu Lys Pro Asp Cys Met Glu Arg Leu Gln Leu Gln Arg Arg Leu	470	475	480
Gly Cys Arg Thr Phe His Trp Phe Leu Ala Asn Val Tyr Pro Glu	485	490	495
Leu Tyr Pro Ser Glu Pro Arg Pro Ser Phe Ser Gly Lys Leu His	500	505	510
Asn Thr Gly Leu Gly Leu Cys Ala Asp Cys Gln Ala Glu Gly Asp	515	520	525
Ile Leu Gly Cys Pro Met Val Leu Ala Pro Cys Ser Asp Ser Arg	530	535	540
Gln Gln Gln Tyr Leu Gln His Thr Ser Arg Lys Glu Ile His Phe	545	550	555

SECRET

```
<210> 348
<211> 23
<212> DNA
<213> Artificial Sequence
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<220>
<223> Synthetic oligonucleotide probe

<400> 348
ggagaggtgg tggccatgga cag 23

```
<210> 349
<211> 24
<212> DNA
<213> Artificial Sequence
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<220>
<223> Synthetic oligonucleotide probe

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<400> 349
ctgtcactgc aaggagccaa cacc 24
```

```
<210> 350
<211> 45
<212> DNA
<213> Artificial Sequence
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<220>
<223> Synthetic oligonucleotide probe

<400> 350
tatgtcgctg cgaggtggtg aaaacctcga actgtctttc aaggc 45

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<210> 351
<211> 2524
<212> DNA
<213> Homo sapiens
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cgccaagcat	gcagtaaagg	ctgaaaatct	gggtcacagc	tgaggaagac	50
ctcagacatg	gagtcaggga	tgtggcctgc	gctgctgctg	tcccacctcc	100
tccctctctg	gccactgctg	ttgctgcccc	tcccaccgcc	tgctcagggc	150
tcttcatact	cccctcgaac	cccaccagcc	ccagcccgcc	ccccgtgtgc	200
caggggaggg	ccctcgggcc	cacgtcatgt	gtgctgtgtg	gagcgagcac	250
ctccaccaag	ccgatctcct	cgggtcccaa	gatcacgtcg	gcaagtccctg	300
cctggcactg	cacccccagc	caccccatca	ggctttgagg	agggggccgcc	350
ctcatcccaa	tacccttggg	ctatcgtgtg	gggtcccacc	gtgtctcgag	400
aggatggagg	ggaccccaac	tctgccaatc	ccggattttct	ggactatgggt	450
tttgagccc	ctcatgggct	cgcaacccca	caccccaact	cagactccat	500
gcgaggtgat	ggagatgggc	ttatccttgg	agaggcacct	gccaccctgc	550
ggccattcct	gttcgggggc	cgtggggaag	gtgtggaccc	ccagctctat	600
gtcacaatta	ccatctccat	catcattgtt	ctcgtggcca	ctggcatcat	650
cttcaagttc	tgctgggacc	gcagccagaa	gcgacgcaga	ccctcagggc	700
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caccctgac	catgaggagc	cccgaggggg	accccggcct	gggatgcccc	850
accccaaggg	ggctccagcc	ttccagttga	accggtgagg	gcagggggcaa	900
tgggatggga	gggcaaagag	ggaaggcaac	ttaggtcttc	agagctgggg	950
tgggggtgcc	ctctggatgg	gtagtgagga	ggcaggcgtg	gcctcccaca	1000
gcccctggcc	ctcccaaggg	ggctggacca	gctcctctct	gggaggcacc	1050
cttctttctc	ccagtctctc	aggatctgtg	tcctattctc	tgctgcccac	1100
aactccaact	ctgccctctt	tggttttttc	tcatgccacc	ttgtctaaga	1150
caactctgcc	ctcttaacct	tgattccccc	tctttgtctt	gaacttcccc	1200
ttctattctg	gcctacccct	tggttcctga	ctgtgccctt	tcctcttccc	1250
tctcaggatt	cccctgggtga	atctgtgatg	cccccaatgt	tgggggtgcag	1300
ccaagcagga	ggccaagggg	ccggcacagc	ccccatccca	ctgaggggtgg	1350
ggcagctgtg	gggagctggg	gccacagggg	ctcctggctc	ctgccccttg	1400

cgtgcccacg ctgtggaacg agccggccga gctgccgtcg ggagaaggcc 200
 ccgtggagag caccagcccc ggccgggagc ccgtggacac cgtccccca 250
 gccccaccg tcgcgccagg acccgaggac agcaccgcgc aggagcggct 300
 ggaccagggc ggcgggtcgc tggggcccg cgctatcgcg gccatcgtga 350
 tcgccgcct gctggccacc tgcgtggtgc tggcgctcgt ggtcgtcgcg 400
 ctgagaaagt tttctgcctc ctgaagcgaa taaaggggcc gcgcccggcc 450
 cgggcgcgac tcggcaaaaa aaaaaaaaaa 480

<210> 354
 <211> 121
 <212> PRT
 <213> Homo sapiens

<400> 354
 Met Ala Ser Cys Leu Ala Leu Arg Met Ala Leu Leu Leu Val Ser
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 Gly Val Leu Ala Pro Ala Val Leu Thr Asp Asp Val Pro Gln Glu
 20 25 30
 Pro Val Pro Thr Leu Trp Asn Glu Pro Ala Glu Leu Pro Ser Gly
 35 40 45
 Glu Gly Pro Val Glu Ser Thr Ser Pro Gly Arg Glu Pro Val Asp
 50 55 60
 Thr Gly Pro Pro Ala Pro Thr Val Ala Pro Gly Pro Glu Asp Ser
 65 70 75
 Thr Ala Gln Glu Arg Leu Asp Gln Gly Gly Gly Ser Leu Gly Pro
 80 85 90
 Gly Ala Ile Ala Ala Ile Val Ile Ala Ala Leu Leu Ala Thr Cys
 95 100 105
 Val Val Leu Ala Leu Val Val Val Ala Leu Arg Lys Phe Ser Ala
 110 115 120
 Ser

<210> 355
 <211> 2134
 <212> DNA
 <213> Homo sapiens

<400> 355
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 gttggccggc ggcgggccgg gacgggcatg gccctgctgc tgtgcctggt 100

SECRET

acccatgtgg tggtttcatg aacagaccac gctcctctgc cttctcctgg 1550
 cctgggacac acagagccac cccggccttg tgagtgaccc agagaaggga 1600
 ggccctcgga gaaggggtgc tcgtaagcca acaccagcgt gccgcggcct 1650
 gcacaccctt cggacatccc aggcacgagg gtgtcgtgga tgtggccaca 1700
 cataggacca cacgtcccag ctgggaggag aggcctgggg ccccaggga 1750
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 gcagcctggt atcgccagcc ttaaggtgtc tggagcccc acacttggcc 1850
 aacctgacct tggaagatgc tgctgagtgt ctcaagcagc actgacagca 1900
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 cctgcctgtc actctggagc tgggctgctg ctgcctcagg acccctctc 2000
 cgaccccgga cagagctgag ctggccaggg ccaggagggc gggaggagg 2050
 gaatgggggt gggctgtgcg cagcatcagc gcctgggcag gtccgcagag 2100
 ctgcgggatg tgattaaagt ccctgatgtt tctc 2134

<210> 356
 <211> 157
 <212> PRT
 <213> Homo sapiens

<400> 356
 Met Ala Leu Leu Leu Cys Leu Val Cys Leu Thr Ala Ala Leu Ala
 1 5 10 15
 His Gly Cys Leu His Cys His Ser Asn Phe Ser Lys Lys Phe Ser
 20 25 30
 Phe Tyr Arg His His Val Asn Phe Lys Ser Trp Trp Val Gly Asp
 35 40 45
 Ile Pro Val Ser Gly Ala Leu Leu Thr Asp Trp Ser Asp Asp Thr
 50 55 60
 Met Lys Glu Leu His Leu Ala Ile Pro Ala Lys Ile Thr Arg Glu
 65 70 75
 Lys Leu Asp Gln Val Ala Thr Ala Val Tyr Gln Met Met Asp Gln
 80 85 90
 Leu Tyr Gln Gly Lys Met Tyr Phe Pro Gly Tyr Phe Pro Asn Glu
 95 100 105
 Leu Arg Asn Ile Phe Arg Glu Gln Val His Leu Ile Gln Asn Ala
 110 115 120
 Ile Ile Glu Arg His Leu Ala Pro Gly Ser Trp Gly Gly Gln

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<400> 357
agcaggagca ggagagggac aatggaagct gccccgtcca ggttcattgtt 50
cctcttatttt ctcttcacgt gtgagctggc tgcagaagtt gctgcagaag 100
ttgagaaatc ctcagatggg cctgggtgctg cccaggaacc cacgtggctc 150
acagatgtcc cagctgccat ggaattcatt gctgccactg aggtggctgt 200
cataggcttc ttccaggatt tagaaatacc agcagtgcc atactccata 250
gcatggtgca aaaattccca ggcgtgtcat ttgggatcag cactgattct 300
gaggttctga cacactacaa catcactggg aacaccatct gcctctttcg 350
cctggtagac aatgaacaac tgaattttaga ggacgaagac attgaaagca 400
ttgatgccac caaattgagc cgtttcattg agatcaacag cctccacatg 450
gtgacagagt acaaccctgt gactgtgatt gggttattca acagcgtaat 500
tcagattcat ctctctctga taatgaacaa ggccctccca gagtatgaag 550
agaacatgca cagataccag aaggcagcca agctcttcca ggggaagatt 600
ctctttattc tgggtggacag tggtatgaaa gaaaatggga aggtgatatc 650
atTTTTcaaa ctaaaggagt ctcaactgcc agctttggca atttaccaga 700
ctctagatga cgagtgggat aactgccca cagcagaagt ttccgtagag 750
catgtgcaaa acttttgtga tggattccta agtggaaaat tgttgaaaga 800
aaatcgtgaa tcagaaggaa agactccaaa ggtggaactc tgacttctcc 850
ttggaactac atatggccaa gtatctactt tatgcaaagt aaaaaggcac 900
aactcaaatc tcagagacac taaacaacag gatcactagg cctgccaaacc 950
acacacacac gcacgtgcac acacgcacgc acgcgtgcac acacacacgc 1000
gcacacacac acacacacag agcttcattt cctgtcttaa aatctcgttt 1050
tctcttcttc cttcttttaa atttcatatc ctcaactcct atccaatttc 1100

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(continued)

<210> 358

<212> PRT

<400> 358

Leu Ile Met Asn Lys Ala Ser Pro Glu Tyr Glu Glu Asn Met His
170 175 180

Arg Tyr Gln Lys Ala Ala Lys Leu Phe Gln Gly Lys Ile Leu Phe
185 190 195

Ile Leu Val Asp Ser Gly Met Lys Glu Asn Gly Lys Val Ile Ser
200 205 210

Phe Phe Lys Leu Lys Glu Ser Gln Leu Pro Ala Leu Ala Ile Tyr
215 220 225

Gln Thr Leu Asp Asp Glu Trp Asp Thr Leu Pro Thr Ala Glu Val
230 235 240

Ser Val Glu His Val Gln Asn Phe Cys Asp Gly Phe Leu Ser Gly
245 250 255

Lys Leu Leu Lys Glu Asn Arg Glu Ser Glu Gly Lys Thr Pro Lys
260 265 270

Val Glu Leu

<210> 359
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 359
ccagcagtgc ccatactcca tagc 24

<210> 360
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 360
tgacgagtgg gatacactgc 20

<210> 361
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 361
gctctacgga aacttctgct gtgg 24

<210> 362
<211> 50
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 362
attcccaggc gtgtcatttg ggatcagcac tgattctgag gttctgacac 50

<210> 363
<211> 1777
<212> DNA
<213> Homo sapiens

<400> 363
ggagagccgc ggctgggacc ggagtgggga gcgcggcgtg gaggtgccac 50
ccggcgcggg tggcggagag atcagaagcc tcttcccaaa gccgagccaa 100
cctcagcggg gacccgggct cagggacgcg gcggcggcgg cggcgactgc 150
agtggctgga cgatggcagc gtccgccgga gccggggcgg tgattgcagc 200
cccagacagc cggcgtggtg tgtggtcggt gctggcggcg gcgcttgggc 250
tcttgacagc tggagtatca gccttgaag tatatacgcc aaaagaaatc 300
ttcgtggcaa atggtacaca agggaagctg acctgcaagt tcaagtctac 350
tagtacgact ggccgggttg cctcagtctc ctggagcttc cagccagagg 400
gggccgacac tactgtgtcg tttttccact actcccaagg gcaagtgtac 450
cttgggaatt atccaccatt taaagacaga atcagctggg ctggagacct 500
tgacaagaaa gatgcatcaa tcaacataga aaatatgcag ttatacaca 550
atggcaccta tatctgtgat gtcaaaaacc ctctgacat cgttgtccag 600
cctggacaca ttaggtctta tgtcgtagaa aaagagaatt tgctgtgtt 650
tccagtttgg gtagtggtgg gcatagttac tgctgtggtc ctaggtctca 700
ctctgtcat cagcatgatt ctggctgtcc tctatagaag gaaaaactct 750
aaacgggatt aactggctg cagtacatca gagagtttgt caccagttaa 800
gcaggctcct cggaggtccc cctccgacac tgagggtctt gtaaagagtc 850
tgcttcttgg atctcaccag ggcccagtc tatatgcaca gttagaccac 900
tccggcggac atcacagtga caagattaac aagtcagagt ctgtggtgta 950
tgcggatatc cgaaagaatt aagagaatac ctagaacata tctcagcaa 1000

Ser	Gln	Gly	Gln	Val	Tyr	Leu	Gly	Asn	Tyr	Pro	Pro	Phe	Lys	Asp	
				95					100					105	
Arg	Ile	Ser	Trp	Ala	Gly	Asp	Leu	Asp	Lys	Lys	Asp	Ala	Ser	Ile	
				110					115					120	
Asn	Ile	Glu	Asn	Met	Gln	Phe	Ile	His	Asn	Gly	Thr	Tyr	Ile	Cys	
				125					130					135	
Asp	Val	Lys	Asn	Pro	Pro	Asp	Ile	Val	Val	Gln	Pro	Gly	His	Ile	
				140					145					150	
Arg	Leu	Tyr	Val	Val	Glu	Lys	Glu	Asn	Leu	Pro	Val	Phe	Pro	Val	
				155					160					165	
Trp	Val	Val	Val	Gly	Ile	Val	Thr	Ala	Val	Val	Leu	Gly	Leu	Thr	
				170					175					180	
Leu	Leu	Ile	Ser	Met	Ile	Leu	Ala	Val	Leu	Tyr	Arg	Arg	Lys	Asn	
				185					190					195	
Ser	Lys	Arg	Asp	Tyr	Thr	Gly	Cys	Ser	Thr	Ser	Glu	Ser	Leu	Ser	
				200					205					210	
Pro	Val	Lys	Gln	Ala	Pro	Arg	Lys	Ser	Pro	Ser	Asp	Thr	Glu	Gly	
				215					220					225	
Leu	Val	Lys	Ser	Leu	Pro	Ser	Gly	Ser	His	Gln	Gly	Pro	Val	Ile	
				230					235					240	
Tyr	Ala	Gln	Leu	Asp	His	Ser	Gly	Gly	His	His	Ser	Asp	Lys	Ile	
				245					250					255	
Asn	Lys	Ser	Glu	Ser	Val	Val	Tyr	Ala	Asp	Ile	Arg	Lys	Asn		
				260					265						

<210> 365
 <211> 1321
 <212> DNA
 <213> Homo sapiens

<400> 365
 gccggctgtg cagagacgcc atgtaccggc tctgtcagc agtgactgcc 50
 cgggctgccg cccccggggg cttggcctca agctgcggac gacgcggggg 100
 ccatcagcgc gccgggctgc cgcctctcgg ccacggctgg gtcggggggc 150
 tcgggctggg gctggggctg gcgctcggg tgaagctggc aggtgggctg 200
 aggggcgcgg ccccggcga gtccccgcg gccccgacc ctgaggcgtc 250
 gcctctggcc gagccgccac aggagcagtc cctcgccccg tggctctccg 300
 agaccccggc gccgcctgc tccaggtgct tcgccagagc catcgagagc 350
 agccgcgacc tgctgcacag gatcaaggat gaggtggggc caccggggcat 400

Arg Gly Ala Ala Pro Ala Gln Ser Pro Ala Ala Pro Asp Pro Glu	65	70	75
Ala Ser Pro Leu Ala Glu Pro Pro Gln Glu Gln Ser Leu Ala Pro	80	85	90
Trp Ser Pro Gln Thr Pro Ala Pro Pro Cys Ser Arg Cys Phe Ala	95	100	105
Arg Ala Ile Glu Ser Ser Arg Asp Leu Leu His Arg Ile Lys Asp	110	115	120
Glu Val Gly Ala Pro Gly Ile Val Val Gly Val Ser Val Asp Gly	125	130	135
Lys Glu Val Trp Ser Glu Gly Leu Gly Tyr Ala Asp Val Glu Asn	140	145	150
Arg Val Pro Cys Lys Pro Glu Thr Val Met Arg Ile Ala Ser Ile	155	160	165
Ser Lys Ser Leu Thr Met Val Ala Leu Ala Lys Leu Trp Glu Ala	170	175	180
Gly Lys Leu Asp Leu Asp Ile Pro Val Gln His Tyr Val Pro Glu	185	190	195
Phe Pro Glu Lys Glu Tyr Glu Gly Glu Lys Val Ser Val Thr Thr	200	205	210
Arg Leu Leu Ile Ser His Leu Ser Gly Ile Arg His Tyr Glu Lys	215	220	225
Asp Ile Lys Lys Val Lys Glu Glu Lys Ala Tyr Lys Ala Leu Lys	230	235	240
Met Met Lys Glu Asn Val Ala Phe Glu Gln Glu Lys Glu Gly Lys	245	250	255
Ser Asn Glu Lys Asn Asp Phe Thr Lys Phe Lys Thr Glu Gln Glu	260	265	270
Asn Glu Ala Lys Cys Arg Asn Ser Lys Pro Gly Lys Lys Lys Asn	275	280	285
Asp Phe Glu Gln Gly Glu Leu Tyr Leu Arg Glu Lys Phe Glu Asn	290	295	300
Ser Ile Glu Ser Leu Arg Leu Phe Lys Asn Asp Pro Leu Phe Phe	305	310	315
Lys Pro Gly Ser Gln Phe Leu Tyr Ser Thr Phe Gly Tyr Thr Leu	320	325	330
Leu Ala Ala Ile Val Glu Arg Ala Ser Gly Cys Lys Tyr Leu Asp	335	340	345

Tyr Met Gln Lys Ile Phe His Asp Leu Asp Met Leu Thr Thr Val
350 355 360

Gln Glu Glu Asn Glu Pro Val Ile Tyr Asn Arg Ala Arg
365 370

<210> 367

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 367

tggaagaa gtctggtcag aaggtttagg 30

<210> 368

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 368

catttggtt cattctcctg ctctg 25

<210> 369

<211> 28

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 369

aaaacctcag aacaactcat ttgcacc 28

<210> 370

<211> 41

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 370

gtctcaccat ggttgctctt gccaaattgt gggaagcagg g 41

<210> 371

<211> 1150

<212> DNA

<213> Homo sapiens

<400> 371

gtgacactat agaagagcta tgacgtcgca tgcacgcgta cgtaagctcg 50

gaattcggct cgaggctggt gggaagaagc cgagatggcg gcagccagcg 100
ctggggcaac ccggctgctc ctgctcttgc tgatggcggt agcagcgccc 150
agtcgagccc ggggcagcgg ctgccgggcc gggactgggt cgcgaggggc 200
tggggcgga ggtcgagagg gcgaggcctg tggcacgggt gggctgctgc 250
tgggacactc atttgagatc gatgacagtg ccaacttccg gaagcggggc 300
tcaactgctct ggaaccagca ggatggtacc ttgtccctgt cacagcggca 350
gctcagcgag gaggagcggg gccgactccg ggatgtggca gccctgaatg 400
gcctgtaccg ggtccggatc ccaaggcgac ccggggccct ggatggcctg 450
gaagctgggt gctatgtctc ctcccttgtc cctgcgtgct ccctgggtga 500
gtcgcacctg tcggaccagc tgaccctgca cgtggatgtg gccggcaacg 550
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gcccaccaca gcccaggcc ctgagacggc ggccttcatt gagcgccctg 700
agatggaaca ggcccagaag gccaagaacc cccaggagca gaagtccttc 750
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tacaagcttg attgaaattc actgctcact tgatacgtta ttcagaaaacc 1050
caaggaatgg ctgtcccat cctcatgtgg ctgtgtggag ctcagctgtg 1100
ttgtgtggca gtttattaaa ctgtcccca gatcgacacg caaaaaaaaaa 1150

<210> 372
<211> 269
<212> PRT
<213> Homo sapiens

<400> 372
Met Ala Ala Ala Ser Ala Gly Ala Thr Arg Leu Leu Leu Leu
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Leu Met Ala Val Ala Ala Pro Ser Arg Ala Arg Gly Ser Gly Cys
20 25 30

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

Arg	Ala	Gly	Thr	Gly	Ala	Arg	Gly	Ala	Gly	Ala	Glu	Gly	Arg	Glu	35	40	45
Gly	Glu	Ala	Cys	Gly	Thr	Val	Gly	Leu	Leu	Leu	Glu	His	Ser	Phe	50	55	60
Glu	Ile	Asp	Asp	Ser	Ala	Asn	Phe	Arg	Lys	Arg	Gly	Ser	Leu	Leu	65	70	75
Trp	Asn	Gln	Gln	Asp	Gly	Thr	Leu	Ser	Leu	Ser	Gln	Arg	Gln	Leu	80	85	90
Ser	Glu	Glu	Glu	Arg	Gly	Arg	Leu	Arg	Asp	Val	Ala	Ala	Leu	Asn	95	100	105
Gly	Leu	Tyr	Arg	Val	Arg	Ile	Pro	Arg	Arg	Pro	Gly	Ala	Leu	Asp	110	115	120
Gly	Leu	Glu	Ala	Gly	Gly	Tyr	Val	Ser	Ser	Phe	Val	Pro	Ala	Cys	125	130	135
Ser	Leu	Val	Glu	Ser	His	Leu	Ser	Asp	Gln	Leu	Thr	Leu	His	Val	140	145	150
Asp	Val	Ala	Gly	Asn	Val	Val	Gly	Val	Ser	Val	Val	Thr	His	Pro	155	160	165
Gly	Gly	Cys	Arg	Gly	His	Glu	Val	Glu	Asp	Val	Asp	Leu	Glu	Leu	170	175	180
Phe	Asn	Thr	Ser	Val	Gln	Leu	Gln	Pro	Pro	Thr	Thr	Ala	Pro	Gly	185	190	195
Pro	Glu	Thr	Ala	Ala	Phe	Ile	Glu	Arg	Leu	Glu	Met	Glu	Gln	Ala	200	205	210
Gln	Lys	Ala	Lys	Asn	Pro	Gln	Glu	Gln	Lys	Ser	Phe	Phe	Ala	Lys	215	220	225
Tyr	Trp	Met	Tyr	Ile	Ile	Pro	Val	Val	Leu	Phe	Leu	Met	Met	Ser	230	235	240
Gly	Ala	Pro	Asp	Thr	Gly	Gly	Gln	Gly	Gly	Gly	Gly	Gly	Gly	Gly	245	250	255
Gly	Gly	Gly	Gly	Ser	Gly	Leu	Cys	Cys	Val	Pro	Pro	Ser	Leu		260	265	

<210> 373
 <211> 1706
 <212> DNA
 <213> Homo sapiens

<400> 373
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 gcttgccggc ctggagccgg acgtgtccgg ggcgtccccc cagaccgggg 100

cagcaggtcg tccgggggcc caccatgctg gtgactgect accttgcttt 150
tgtaggcctc ctggcctcct gcctggggct ggaactgtca agatgccggg 200
ctaaaccccc tggaagggcc tgcagcaatc cctccttctc tcggtttcaa 250
ctggacttct atcaggtcta cttcctggcc ctggcagctg attggcttca 300
ggccccctac ctctataaac tctaccagca ttactacttc ctggaaggtc 350
aaattgccat cctctatgtc tgtggccttg cctctacagt cctctttggc 400
ctagtggcct cctcccttgt ggattggctg ggtcgcaaga attcttgtgt 450
cctcttctcc ctgacttact cactatgctg cttaaccaaa ctctctcaag 500
actactttgt gctgctagtg gggcgagcac ttgggtgggct gtccacagcc 550
ctgctcttct cagccttcga ggctggat atccatgagc acgtggaacg 600
gcatgacttc cctgctgagt ggatcccagc tacctttgct cgagctgect 650
tctggaacca tgtgctggct gtagtggcag gtgtggcagc tgaggctgta 700
gccagctgga tagggctggg gcctgtagcg ccctttgtgg ctgccatccc 750
tctcctggct ctggcagggg ccttggccct tcgaaactgg ggggagaact 800
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tgagagtgtc atcttcatct ttgtcttctc ctggacacct gtgctggacc 950
cacacggggc ccctctgggc attatcttct ccagcttcat ggcagccagc 1000
ctgcttggct cttccctgta ccgtatcgcc acctccaaga ggtaccacct 1050
tcagcccatg cacctgctgt cccttgctgt gctcatcgtc gtcttctctc 1100
tcttcatggt gactttctct accagcccag gccaggagag tccggtggag 1150
tcttcatag ctttctact tattgagttg gcttgtggat tatactttcc 1200
cagcatgagc ttcctacgga gaaaggtgat ccctgagaca gagcaggctg 1250
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ctccttgtec tccatgacag tgatcgaaaa acaggcactc ggaatatgtt 1350
cagcatttgc tctgctgtca tggatgatggc tctgctggca gtggtgggac 1400
tcttcaccgt ggtaaggcat gatgctgagc tgcgggtacc ttcacctact 1450
gaggagccct atgcccctga gctgtaaccc cactccagga caagatagct 1500

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<210> 374
<211> 450
<212> PRT
<213> Homo sapiens
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<400> 374															
Met	Leu	Val	Thr	Ala	Tyr	Leu	Ala	Phe	Val	Gly	Leu	Leu	Ala	Ser	
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Cys	Leu	Gly	Leu	Glu	Leu	Ser	Arg	Cys	Arg	Ala	Lys	Pro	Pro	Gly	
				20					25					30	
Arg	Ala	Cys	Ser	Asn	Pro	Ser	Phe	Leu	Arg	Phe	Gln	Leu	Asp	Phe	
				35					40					45	
Tyr	Gln	Val	Tyr	Phe	Leu	Ala	Leu	Ala	Ala	Asp	Trp	Leu	Gln	Ala	
				50					55					60	
Pro	Tyr	Leu	Tyr	Lys	Leu	Tyr	Gln	His	Tyr	Tyr	Phe	Leu	Glu	Gly	
				65					70					75	
Gln	Ile	Ala	Ile	Leu	Tyr	Val	Cys	Gly	Leu	Ala	Ser	Thr	Val	Leu	
				80					85					90	
Phe	Gly	Leu	Val	Ala	Ser	Ser	Leu	Val	Asp	Trp	Leu	Gly	Arg	Lys	
				95					100					105	
Asn	Ser	Cys	Val	Leu	Phe	Ser	Leu	Thr	Tyr	Ser	Leu	Cys	Cys	Leu	
				110					115					120	
Thr	Lys	Leu	Ser	Gln	Asp	Tyr	Phe	Val	Leu	Leu	Val	Gly	Arg	Ala	
				125					130					135	
Leu	Gly	Gly	Leu	Ser	Thr	Ala	Leu	Leu	Phe	Ser	Ala	Phe	Glu	Ala	
				140					145					150	
Trp	Tyr	Ile	His	Glu	His	Val	Glu	Arg	His	Asp	Phe	Pro	Ala	Glu	
				155					160					165	
Trp	Ile	Pro	Ala	Thr	Phe	Ala	Arg	Ala	Ala	Phe	Trp	Asn	His	Val	
				170					175					180	
Leu	Ala	Val	Val	Ala	Gly	Val	Ala	Ala	Glu	Ala	Val	Ala	Ser	Trp	
				185					190					195	
Ile	Gly	Leu	Gly	Pro	Val	Ala	Pro	Phe	Val	Ala	Ala	Ile	Pro	Leu	
				200					205					210	

Leu Ala Leu Ala Gly Ala Leu Ala Leu Arg Asn Trp Gly Glu Asn
 215 220 225
 Tyr Asp Arg Gln Arg Ala Phe Ser Arg Thr Cys Ala Gly Gly Leu
 230 235 240
 Arg Cys Leu Leu Ser Asp Arg Arg Val Leu Leu Leu Gly Thr Ile
 245 250 255
 Gln Ala Leu Phe Glu Ser Val Ile Phe Ile Phe Val Phe Leu Trp
 260 265 270
 Thr Pro Val Leu Asp Pro His Gly Ala Pro Leu Gly Ile Ile Phe
 275 280 285
 Ser Ser Phe Met Ala Ala Ser Leu Leu Gly Ser Ser Leu Tyr Arg
 290 295 300
 Ile Ala Thr Ser Lys Arg Tyr His Leu Gln Pro Met His Leu Leu
 305 310 315
 Ser Leu Ala Val Leu Ile Val Val Phe Ser Leu Phe Met Leu Thr
 320 325 330
 Phe Ser Thr Ser Pro Gly Gln Glu Ser Pro Val Glu Ser Phe Ile
 335 340 345
 Ala Phe Leu Leu Ile Glu Leu Ala Cys Gly Leu Tyr Phe Pro Ser
 350 355 360
 Met Ser Phe Leu Arg Arg Lys Val Ile Pro Glu Thr Glu Gln Ala
 365 370 375
 Gly Val Leu Asn Trp Phe Arg Val Pro Leu His Ser Leu Ala Cys
 380 385 390
 Leu Gly Leu Leu Val Leu His Asp Ser Asp Arg Lys Thr Gly Thr
 395 400 405
 Arg Asn Met Phe Ser Ile Cys Ser Ala Val Met Val Met Ala Leu
 410 415 420
 Leu Ala Val Val Gly Leu Phe Thr Val Val Arg His Asp Ala Glu
 425 430 435
 Leu Arg Val Pro Ser Pro Thr Glu Glu Pro Tyr Ala Pro Glu Leu
 440 445 450

<210> 375
 <211> 1098
 <212> DNA
 <213> Homo sapiens

<400> 375
 gcgacgcgcg gcggggcggc gagaggaaac gcggcgccgg gccgggcccg 50

Ala Thr Pro Ala Lys Asp Phe Gly Gly Ile Phe His Thr Arg Tyr
50 55 60

Glu Gln Ile His Leu Val Pro Ala Glu Pro Pro Glu Ala Cys Gly
65 70 75

Glu Leu Ser Asn Gly Phe Phe Ile Gln Asp Gln Ile Ala Leu Val
80 85 90

Glu Arg Gly Gly Cys Ser Phe Leu Ser Lys Thr Arg Val Val Gln
95 100 105

Glu His Gly Gly Arg Ala Val Ile Ile Ser Asp Asn Ala Val Asp
110 115 120

Asn Asp Ser Phe Tyr Val Glu Met Ile Gln Asp Ser Thr Gln Arg
125 130 135

Thr Ala Asp Ile Pro Ala Leu Phe Leu Leu Gly Arg Asp Gly Tyr
140 145 150

Met Ile Arg Arg Ser Leu Glu Gln His Gly Leu Pro Trp Ala Ile
155 160 165

Ile Ser Ile Pro Val Asn Val Thr Ser Ile Pro Thr Phe Glu Leu
170 175 180

Leu Gln Pro Pro Trp Thr Phe Trp
185

<210> 377
<211> 496
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> 396
<223> unknown base

<400> 377
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ggctggtggt gatggctggt gtgattccaa tccagggcgg gatcctgaac 100
ctgaacaaga tggtaagca agtgactggg aaaatgccca tcctctccta 150
ctggccctac ggctgtcact gcggactagg tggcagaggc caacccaaag 200
atgccacgga ctggtgctgc cagacccatg actgctgcta tgaccacctg 250
aagacccagg ggtgcggcat ctacaaggac aacaacaaaa gcagcatata 300
ttgtatggat ttatctcaac gctattgttt aatggctgtg tttaatgtga 350
tctatctgga aaatgaggac tccgaataaa aagctattac tawttnaaaa 400

<211> 45
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 381
 ctgaacaaga tgggtcaagca agtgactggg aaaatgccca tcctc 45

<210> 382
 <211> 764
 <212> DNA
 <213> Homo sapiens

<400> 382
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 ggcgatgtgg aggggtgccg gcacaaccag acgcccagtc acaggcgaga 100
 gccctgggat gcaccggcca gaggccatgc tgctgctgct cacgcttgcc 150
 ctctggggg gccccacctg ggcagggag atgtatggcc ctggaggagg 200
 caagtatttc agcaccactg aagactacga ccatgaaatc acagggctgc 250
 ggggtgtctgt aggtcttctc ctgggtgaaa gtgtccaggt gaaacttgga 300
 gactcctggg acgtgaaaact gggagcctta ggtgggaata ccaggaagt 350
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 ctttctcccg gggatggtc atgtacacca gcaaggaccg ctatttctat 450
 tttgggaagc ttgatggcca gatctcctct gcctacocca gccagaggg 500
 gcaggtgctg gtgggcatct atggccagta tcaactcctt ggcatacaaga 550
 gcattggctt tgaatggaat tatccactag aggagccgac cactgagcca 600
 ccagttaatc tcacatactc agcaaaactca cccgtgggtc gctaggggtg 650
 ggtatggggc catccgagct gaggccatct gtgtggtggt ggctgatggt 700
 actggagtaa ctgagtcggg acgctgaatc tgaatccacc aataaataaa 750
 gcttctgcag aaaa 764

<210> 383
 <211> 178
 <212> PRT
 <213> Homo sapiens

<400> 383
 Met His Arg Pro Glu Ala Met Leu Leu Leu Leu Thr Leu Ala Leu
 1 5 10 15

[illegible]

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<210> 384
<211> 2379
<212> DNA
<213> Homo sapiens
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<400> 384
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agctctgtgg ctgaactggg tgctcatcac gggaactgct gggctatgga 100
atacagatgt ggcagctcag gtagccccaatttgcttga agaatacatc 150
atgtttttcg ataagaagaa attgtaggat ccagtttttt ttttaaccgc 200
cccctcccca ccccccaaaa aaactgtaaa gatgcaaaaa cgtaatatcc 250
atgaagatcc tattacctag gaagattttg atgttttgct gcgaatgcgg 300
tgttgggatt tatttgttct tggagtgttc tgcgtggctg gcaaagaata 350
atgttccaaa atcgggtccat ctcccaaggg gtccaatttt tcttcctggg 400
tgtcagcgag ccctgactca ctacagtgcg gctgacaggg gctgtcatgc 450
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aactggcccc	taagccaaaag	caaaaagacct	aaggacgacc	tttgaacaat	500
acaaaggatg	ggtttcaatg	taattaggct	actgagcgga	tcagctgtag	550
cactggttat	agccccact	gtcttactga	caatgctttc	ttctgccgaa	600
cgaggatgcc	ctaagggctg	taggtgtgaa	ggcaaaatgg	tatattgtga	650
atctcagaaa	ttacaggaga	taccctcaag	tatatctgct	ggttgcttag	700
gtttgtccct	tcgctataac	agccttcaaa	aacttaagta	taatcaattt	750
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ttcttagttc	caatagaatc	tcctattttc	ttaacaatac	cttcagacct	900
gtgacaaaatt	tacggaactt	ggatctgtcc	tataatcagc	tgcattctct	950
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ggtctaactc	cctgagaacc	atccctgtgc	gaatattcca	agactgccgc	1050
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<210> 385
<211> 513
<212> PRT
<213> Homo sapiens
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				20					25					30	
Glu	Arg	Gly	Cys	Pro	Lys	Gly	Cys	Arg	Cys	Glu	Gly	Lys	Met	Val	
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Tyr	Cys	Glu	Ser	Gln	Lys	Leu	Gln	Glu	Ile	Pro	Ser	Ser	Ile	Ser	
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Ala	Gly	Cys	Leu	Gly	Leu	Ser	Leu	Arg	Tyr	Asn	Ser	Leu	Gln	Lys	
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Leu	Lys	Tyr	Asn	Gln	Phe	Lys	Gly	Leu	Asn	Gln	Leu	Thr	Trp	Leu	
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Ile	Ser	Tyr	Phe	Leu	Asn	Asn	Thr	Phe	Arg	Pro	Val	Thr	Asn	Leu	
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Arg	Asn	Leu	Asp	Leu	Ser	Tyr	Asn	Gln	Leu	His	Ser	Leu	Gly	Ser	
				140					145					150	

Glu Gln Phe Arg Gly Leu Arg Lys Leu	Leu Ser Leu His Leu Arg
155	160 165
Ser Asn Ser Leu Arg Thr Ile Pro Val	Arg Ile Phe Gln Asp Cys
170	175 180
Arg Asn Leu Glu Leu Leu Asp Leu Gly	Tyr Asn Arg Ile Arg Ser
185	190 195
Leu Ala Arg Asn Val Phe Ala Gly Met	Ile Arg Leu Lys Glu Leu
200	205 210
His Leu Glu His Asn Gln Phe Ser Lys	Leu Asn Leu Ala Leu Phe
215	220 225
Pro Arg Leu Val Ser Leu Gln Asn Leu	Tyr Leu Gln Trp Asn Lys
230	235 240
Ile Ser Val Ile Gly Gln Thr Met Ser	Trp Thr Trp Ser Ser Leu
245	250 255
Gln Arg Leu Asp Leu Ser Gly Asn Glu	Ile Glu Ala Phe Ser Gly
260	265 270
Pro Ser Val Phe Gln Cys Val Pro Asn	Leu Gln Arg Leu Asn Leu
275	280 285
Asp Ser Asn Lys Leu Thr Phe Ile Gly	Gln Glu Ile Leu Asp Ser
290	295 300
Trp Ile Ser Leu Asn Asp Ile Ser Leu	Ala Gly Asn Ile Trp Glu
305	310 315
Cys Ser Arg Asn Ile Cys Ser Leu Val	Asn Trp Leu Lys Ser Phe
320	325 330
Lys Gly Leu Arg Glu Asn Thr Ile Ile	Cys Ala Ser Pro Lys Glu
335	340 345
Leu Gln Gly Val Asn Val Ile Asp Ala	Val Lys Asn Tyr Ser Ile
350	355 360
Cys Gly Lys Ser Thr Thr Glu Arg Phe	Asp Leu Ala Arg Ala Leu
365	370 375
Pro Lys Pro Thr Phe Lys Pro Lys Leu	Pro Arg Pro Lys His Glu
380	385 390
Ser Lys Pro Pro Leu Pro Pro Thr Val	Gly Ala Thr Glu Pro Gly
395	400 405
Pro Glu Thr Asp Ala Asp Ala Glu His	Ile Ser Phe His Lys Ile
410	415 420
Ile Ala Gly Ser Val Ala Leu Phe Leu	Ser Val Leu Val Ile Leu
425	430 435

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 <211> 146
 <212> PRT
 <213> Homo sapiens

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 Leu Pro Cys Glu Glu Asp Glu Met Cys Val Asn Tyr Asn Asp Gln
 35 40 45
 His Pro Asn Gly Trp Tyr Ile Trp Ile Leu Leu Leu Val Leu
 50 55 60
 Val Ala Ala Leu Leu Cys Gly Ala Val Val Leu Cys Leu Gln Cys
 65 70 75
 Trp Leu Arg Arg Pro Arg Ile Asp Ser His Arg Arg Thr Met Ala
 80 85 90
 Val Phe Ala Val Gly Asp Leu Asp Ser Ile Tyr Gly Thr Glu Ala
 95 100 105
 Ala Val Ser Pro Thr Val Gly Ile His Leu Gln Thr Gln Thr Pro
 110 115 120
 Asp Leu Tyr Pro Val Pro Ala Pro Cys Phe Gly Pro Leu Gly Ser
 125 130 135
 Pro Pro Pro Tyr Glu Glu Ile Val Lys Thr Thr
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 <211> 26
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 391
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<210> 392
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 <212> DNA
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<220>
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<400> 392

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<211> 47

<212> DNA

<213> Artificial Sequence

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<223> Synthetic oligonucleotide probe

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<210> 394

<211> 2340

<212> DNA

<213> Homo sapiens

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gacgcagctg acgcccgctt attagctctc gctgcgtcgc cccggctcag 150

aagctccgtg gcggcggcga ccgtgacgag aagcccacgg ccagctcagt 200

tctcttctac tttgggagag agagaaagtc agatgccctt tttaaactcc 250

ctcttcaaaa ctcatctcct gggtgactga gttaatagag tggatacaac 300

cttgctgaag atgaagaata tacaatattg aggatatttt tttctttttt 350

ttttcaagtc ttgatttgtg gcttacctca agttaccatt tttcagtcaa 400

gtctgtttgt ttgcttcttc agaaatgttt tttacaatct caagaaaaaa 450

tatgtcccag aaattgagtt tactgttgct tgtatttggc ctcatttggg 500

gattgatgtt actgcactat acttttcaac aaccaagaca tcaaagcagt 550

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<210> 397
<211> 353
<212> PRT
<213> Homo sapiens
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Thr  Thr  Arg  Pro  Cys  Phe  Pro  Gly  Cys  Gln  Cys  Glu  Val  Glu  Thr
              20              25              30

Phe  Gly  Leu  Phe  Asp  Ser  Phe  Ser  Leu  Thr  Arg  Val  Asp  Cys  Ser
              35              40              45

Gly  Leu  Gly  Pro  His  Ile  Met  Pro  Val  Pro  Ile  Pro  Leu  Asp  Thr
              50              55              60

Ala  His  Leu  Asp  Leu  Ser  Ser  Asn  Arg  Leu  Glu  Met  Val  Asn  Glu
              65              70              75

Ser  Val  Leu  Ala  Gly  Pro  Gly  Tyr  Thr  Thr  Leu  Ala  Gly  Leu  Asp
              80              85              90

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Leu Ser His Asn	Leu Leu Thr Ser Ile	Ser Pro Thr Ala Phe Ser	95	100	105
Arg Leu Arg Tyr	Leu Glu Ser Leu Asp	Leu Ser His Asn Gly Leu	110	115	120
Thr Ala Leu Pro	Ala Glu Ser Phe Thr	Ser Ser Pro Leu Ser Asp	125	130	135
Val Asn Leu Ser	His Asn Gln Leu Arg	Glu Val Ser Val Ser Ala	140	145	150
Phe Thr Thr His	Ser Gln Gly Arg Ala	Leu His Val Asp Leu Ser	155	160	165
His Asn Leu Ile	His Arg Leu Val Pro	His Pro Thr Arg Ala Gly	170	175	180
Leu Pro Ala Pro	Thr Ile Gln Ser Leu	Asn Leu Ala Trp Asn Arg	185	190	195
Leu His Ala Val	Pro Asn Leu Arg Asp	Leu Pro Leu Arg Tyr Leu	200	205	210
Ser Leu Asp Gly	Asn Pro Leu Ala Val	Ile Gly Pro Gly Ala Phe	215	220	225
Ala Gly Leu Gly	Gly Leu Thr His Leu	Ser Leu Ala Ser Leu Gln	230	235	240
Arg Leu Pro Glu	Leu Ala Pro Ser Gly	Phe Arg Glu Leu Pro Gly	245	250	255
Leu Gln Val Leu	Asp Leu Ser Gly Asn	Pro Lys Leu Asn Trp Ala	260	265	270
Gly Ala Glu Val	Phe Ser Gly Leu Ser	Ser Leu Gln Glu Leu Asp	275	280	285
Leu Ser Gly Thr	Asn Leu Val Pro Leu	Pro Glu Ala Leu Leu Leu	290	295	300
His Leu Pro Ala	Leu Gln Ser Val Ser	Val Gly Gln Asp Val Arg	305	310	315
Cys Arg Arg Leu	Val Arg Glu Gly Thr	Tyr Pro Arg Arg Pro Gly	320	325	330
Ser Ser Pro Lys	Val Pro Leu His Cys	Val Asp Thr Arg Glu Ser	335	340	345
Ala Ala Arg Gly	Pro Thr Ile Leu		350		

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 <211> 23
 <212> DNA

<213> Artificial Sequence

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<223> Synthetic oligonucleotide probe

<400> 398

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<210> 399

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 399

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<210> 400

<211> 44

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 400

caacccaag cttaactggg caggagctga ggtgttttca ggcc 44

<210> 401

<211> 1571

<212> DNA

<213> Homo sapiens

<400> 401

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<211> 261
<212> PRT
<213> Homo sapiens

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Thr Cys Trp Ala Leu Thr Ala Glu Pro Gly Trp Gly Gln Asn Lys
35 40 45

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Arg	Pro	Glu	Ile	Phe	Ser	Ser	Arg	Glu	Ala	Trp	Gln	Phe	Phe	Leu
				65					70					75
Leu	Leu	Trp	Ser	Pro	Asp	Phe	Arg	Pro	Lys	Met	Lys	Ala	Ser	Ser
				80					85					90
Leu	Ala	Phe	Ser	Leu	Leu	Ser	Ala	Ala	Phe	Tyr	Leu	Leu	Trp	Thr
				95					100					105
Pro	Ser	Thr	Gly	Leu	Lys	Thr	Leu	Asn	Leu	Gly	Ser	Cys	Val	Ile
				110					115					120
Ala	Thr	Asn	Leu	Gln	Glu	Ile	Arg	Asn	Gly	Phe	Ser	Glu	Ile	Arg
				125					130					135
Gly	Ser	Val	Gln	Ala	Lys	Asp	Gly	Asn	Ile	Asp	Ile	Arg	Ile	Leu
				140					145					150
Arg	Arg	Thr	Glu	Ser	Leu	Gln	Asp	Thr	Lys	Pro	Ala	Asn	Arg	Cys
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Cys	Leu	Leu	Arg	His	Leu	Leu	Arg	Leu	Tyr	Leu	Asp	Arg	Val	Phe
				170					175					180
Lys	Asn	Tyr	Gln	Thr	Pro	Asp	His	Tyr	Thr	Leu	Arg	Lys	Ile	Ser
				185					190					195
Ser	Leu	Ala	Asn	Ser	Phe	Leu	Thr	Ile	Lys	Lys	Asp	Leu	Arg	Leu
				200					205					210
Ser	His	Ala	His	Met	Thr	Cys	His	Cys	Gly	Glu	Glu	Ala	Met	Lys
				215					220					225
Lys	Tyr	Ser	Gln	Ile	Leu	Ser	His	Phe	Glu	Lys	Leu	Glu	Pro	Gln
				230					235					240
Ala	Ala	Val	Val	Lys	Ala	Leu	Gly	Glu	Leu	Asp	Ile	Leu	Leu	Gln
				245					250					255
Trp	Met	Glu	Glu	Thr	Glu									
				260										

<210> 403

<211> 28

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 403

ctcctgtggt ctccagattt caggccta 28

<210> 404
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 404
agtcctcctt aagattctga tgtcaa 26

<210> 405
<211> 998
<212> DNA
<213> Homo sapiens

<400> 405
ccgttatcgt cttgcgctac tgctgaatgt ccgtcccga ggaggaggag 50
aggcttttgc cgctgaccca gagatggccc cgagcgagca aattcctact 100
gtccggctgc gcggctaccg tggccgagct agcaaccttt cccctggatc 150
tcacaaaaac tcgactcaa atgcaaggag aagcagctct tgctcggttg 200
ggagacggtg caagagaatc tgccccctat aggggaatgg tgcgcacagc 250
cctagggatc attgaagagg aaggctttct aaagctttgg caaggagtga 300
caccgcctat ttacagacac gtagtgtatt ctggaggctg aatggtcaca 350
tatgaacatc tccgagaggt tgtgtttggc aaaagtgaag atgagcatta 400
tccccttttg aaatcagtc tttggaggat gatggctggt gttattggcc 450
agtttttagc caatccaact gacctagtga aggttcagat gcaaattgaa 500
ggaaaaagga aactggaagg aaaaccattg cgatttcgtg gtgtacatca 550
tgcatttgca aaaatcttag ctgaaggagg aatacgaggg ctttgggcag 600
gctgggtacc caatatacaa agagcagcac tggatgaatat gggagattta 650
accacttatg atacagtga acactacttg gtattgaata caccattga 700
ggacaatata atgactcacg gtttatcaag tttatgttct ggactggtag 750
cttctattct gggaacacca gccgatgtca tcaaaagcag aataatgaat 800
caaccacgag ataaacaagg aaggggactt ttgtataaat catogactga 850
ctgcttgatt caggctgttc aaggtgaagg attcatgagt ctatataaag 900
gctttttacc atcttggctg agaatgaccc cttgggtcaat ggtgttctgg 950
cttacttatg aaaaaatcag agagatgagt ggagtcagtc catttta 998

<210> 406
 <211> 323
 <212> PRT
 <213> Homo sapiens

<400> 406

Met	Ser	Val	Pro	Glu	Glu	Glu	Glu	Arg	Leu	Leu	Pro	Leu	Thr	Gln
1				5					10					15
Arg	Trp	Pro	Arg	Ala	Ser	Lys	Phe	Leu	Leu	Ser	Gly	Cys	Ala	Ala
				20					25					30
Thr	Val	Ala	Glu	Leu	Ala	Thr	Phe	Pro	Leu	Asp	Leu	Thr	Lys	Thr
				35					40					45
Arg	Leu	Gln	Met	Gln	Gly	Glu	Ala	Ala	Leu	Ala	Arg	Leu	Gly	Asp
				50					55					60
Gly	Ala	Arg	Glu	Ser	Ala	Pro	Tyr	Arg	Gly	Met	Val	Arg	Thr	Ala
				65					70					75
Leu	Gly	Ile	Ile	Glu	Glu	Glu	Gly	Phe	Leu	Lys	Leu	Trp	Gln	Gly
				80					85					90
Val	Thr	Pro	Ala	Ile	Tyr	Arg	His	Val	Val	Tyr	Ser	Gly	Gly	Arg
				95					100					105
Met	Val	Thr	Tyr	Glu	His	Leu	Arg	Glu	Val	Val	Phe	Gly	Lys	Ser
				110					115					120
Glu	Asp	Glu	His	Tyr	Pro	Leu	Trp	Lys	Ser	Val	Ile	Gly	Gly	Met
				125					130					135
Met	Ala	Gly	Val	Ile	Gly	Gln	Phe	Leu	Ala	Asn	Pro	Thr	Asp	Leu
				140					145					150
Val	Lys	Val	Gln	Met	Gln	Met	Glu	Gly	Lys	Arg	Lys	Leu	Glu	Gly
				155					160					165
Lys	Pro	Leu	Arg	Phe	Arg	Gly	Val	His	His	Ala	Phe	Ala	Lys	Ile
				170					175					180
Leu	Ala	Glu	Gly	Gly	Ile	Arg	Gly	Leu	Trp	Ala	Gly	Trp	Val	Pro
				185					190					195
Asn	Ile	Gln	Arg	Ala	Ala	Leu	Val	Asn	Met	Gly	Asp	Leu	Thr	Thr
				200					205					210
Tyr	Asp	Thr	Val	Lys	His	Tyr	Leu	Val	Leu	Asn	Thr	Pro	Leu	Glu
				215					220					225
Asp	Asn	Ile	Met	Thr	His	Gly	Leu	Ser	Ser	Leu	Cys	Ser	Gly	Leu
				230					235					240
Val	Ala	Ser	Ile	Leu	Gly	Thr	Pro	Ala	Asp	Val	Ile	Lys	Ser	Arg
				245					250					255

[illegible]

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<210> 414
<211> 1337
<212> DNA
<213> Homo sapiens
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<400> 414					
gttgatggca	aacttcctca	aaggaggggc	agagcctgcg	cagggcagga	50
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actgcatcta	gaggagggcc	gtctgtgagg	ccactacccc	tccagcaact	150
gggaggtggg	actgtcagaa	gctggcccag	ggtaggtggtc	agctgggtca	200
gggacctacg	gcacctgctg	gaccacctcg	ccttctccat	cgaagcaggg	250
aagtgggagc	ctcgagccct	cgggtggaag	ctgaccccaa	gccacccttc	300
acctggacag	gatgagagtg	tcaggtgtgc	ttcgccctct	ggccctcatc	350
tttgccatag	tcacgacatg	gatgtttatt	cgaagctaca	tgagcttcag	400
catgaaaacc	atccgtctgc	cacgctggct	ggcagcctcg	cccaccaagg	450
agatccaggt	taaaaagtac	aagtgtggcc	tcatcaagcc	ctgccagacc	500
aactactttg	cgtttaaaat	ctgcagtggg	gccgccaacg	tcgtggggccc	550
tactatgtgc	tttgaagacc	gcatgatcat	gagtcctgtg	aaaaacaatg	600
tgggcagagg	cctaaacatc	gccctggtga	atggaaccac	gggagctgtg	650
ctgggacaga	aggcatttga	catgtactct	ggagatgtta	tgcacctagt	700
gaaattcctt	aaagaaattc	cgggggggtgc	actgggtgctg	gtggcctcct	750
acgacgatcc	agggaccaa	atgaacgatg	aaagcaggaa	actcttctct	800
gacttgggga	gttcctacgc	aaaacaactg	ggcttcgggg	acagctgggt	850
cttcatagga	gccaaagacc	tcaggggtaa	aagccctttt	gagcagttct	900
taaagaacag	cccagacaca	aacaaatacg	agggatggcc	agagctgctg	950
gagatggagg	gctgcatgcc	cccgaagcca	ttttaggggtg	gctgtggctc	1000
ttcctcagcc	aggggcctga	agaagctcct	gcctgactta	ggagtcagag	1050
cccggcaggg	gctgaggagg	aggagcaggg	ggtgctgcgt	ggaaggtgct	1100
gcaggtcctt	gcacgctgtg	tcgcgcctct	cctcctcgga	aacagaacct	1150
tcccacagca	catcctaccc	ggaagaccag	cctcagaggg	tccttctgga	1200

accagctgtc tgtggagaga atggggtgct ttcgtcaggg actgctgacg 1250
 gctggtcctg aggaaggaca aactgccag acttgagccc aattaaattt 1300
 tatttttggct ggttttgaaa aaaaaaaaaa aaaaaaa 1337

<210> 415
 <211> 224
 <212> PRT
 <213> Homo sapiens

<400> 415
 Met Arg Val Ser Gly Val Leu Arg Leu Leu Ala Leu Ile Phe Ala
 1 5 10 15
 Ile Val Thr Thr Trp Met Phe Ile Arg Ser Tyr Met Ser Phe Ser
 20 25 30
 Met Lys Thr Ile Arg Leu Pro Arg Trp Leu Ala Ala Ser Pro Thr
 35 40 45
 Lys Glu Ile Gln Val Lys Lys Tyr Lys Cys Gly Leu Ile Lys Pro
 50 55 60
 Cys Pro Ala Asn Tyr Phe Ala Phe Lys Ile Cys Ser Gly Ala Ala
 65 70 75
 Asn Val Val Gly Pro Thr Met Cys Phe Glu Asp Arg Met Ile Met
 80 85 90
 Ser Pro Val Lys Asn Asn Val Gly Arg Gly Leu Asn Ile Ala Leu
 95 100 105
 Val Asn Gly Thr Thr Gly Ala Val Leu Gly Gln Lys Ala Phe Asp
 110 115 120
 Met Tyr Ser Gly Asp Val Met His Leu Val Lys Phe Leu Lys Glu
 125 130 135
 Ile Pro Gly Gly Ala Leu Val Leu Val Ala Ser Tyr Asp Asp Pro
 140 145 150
 Gly Thr Lys Met Asn Asp Glu Ser Arg Lys Leu Phe Ser Asp Leu
 155 160 165
 Gly Ser Ser Tyr Ala Lys Gln Leu Gly Phe Arg Asp Ser Trp Val
 170 175 180
 Phe Ile Gly Ala Lys Asp Leu Arg Gly Lys Ser Pro Phe Glu Gln
 185 190 195
 Phe Leu Lys Asn Ser Pro Asp Thr Asn Lys Tyr Glu Gly Trp Pro
 200 205 210
 Glu Leu Leu Glu Met Glu Gly Cys Met Pro Pro Lys Pro Phe
 215 220

cgctacaatg	gctcgctcac	aactccccct	tgctaccaga	gtgtgctctg	950
gacagttttt	tatagaaggt	cccagatttc	aatggaacag	ctggaaaagc	1000
ttcaggggac	attgttctcc	acagaagagg	agccctctaa	gcttctggta	1050
cagaactacc	gagcccttca	gcctctcaat	cagcgcatgg	tctttgcttc	1100
tttcatccaa	gcaggatcct	cgtataccac	aggtgaaatg	ctgagtctag	1150
gtgtaggaat	cttggttggc	tgtctctgcc	ttctctctggc	tgtttatttc	1200
attgctagaa	agattcggaa	gaagaggctg	gaaaaccgaa	agagtgtggt	1250
cttcacctca	gcacaagcca	cgactgaggc	ataaattcct	tctcagatac	1300
catggatgtg	gatgacttcc	cttcatgcct	atcaggaagc	ctctaaaatg	1350
gggtgtagga	tctggccaga	aacactgtag	gagtagtaag	catatgtcct	1400
ccttcccctg	gacatctctt	agagaggaat	ggaccaggc	tgtcattcca	1450
ggaagaactg	cagagccttc	agcctctcca	aacatgtagg	aggaaatgag	1500
gaaatcgctg	tgttgttaat	gcagaganca	aactctgttt	agttgcaggg	1550
gaagtttggg	atatacccca	aagtctctcta	ccccctcact	tttatggccc	1600
tttccctaga	tatactgctg	gatctctcct	taggataaag	agttgctggt	1650
gaagttgtat	atTTTTgatc	aatatatttg	gaaattaaag	tttctgactt	1700
t	1701				

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<210> 423
<211> 337
<212> PRT
<213> Homo sapiens
```

```

<400> 423
Met Leu Phe Ser Ala Leu Leu Leu Glu Val Ile Trp Ile Leu Ala
  1                      5                      10                      15

Ala Asp Gly Gly Gln His Trp Thr Tyr Glu Gly Pro His Gly Gln
                20                      25                      30

Asp His Trp Pro Ala Ser Tyr Pro Glu Cys Gly Asn Asn Ala Gln
                35                      40                      45

Ser Pro Ile Asp Ile Gln Thr Asp Ser Val Thr Phe Asp Pro Asp
                50                      55                      60

Leu Pro Ala Leu Gln Pro His Gly Tyr Asp Gln Pro Gly Thr Glu
                65                      70                      75

Pro Leu Asp Leu His Asn Asn Gly His Thr Val Gln Leu Ser Leu
                80                      85                      90

```

Pro Ser Thr Leu Tyr Leu Gly Gly Leu	Pro Arg Lys Tyr Val Ala
95	100 105
Ala Gln Leu His Leu His Trp Gly Gln	Lys Gly Ser Pro Gly Gly
110	115 120
Ser Glu His Gln Ile Asn Ser Glu Ala	Thr Phe Ala Glu Leu His
125	130 135
Ile Val His Tyr Asp Ser Asp Ser Tyr	Asp Ser Leu Ser Glu Ala
140	145 150
Ala Glu Arg Pro Gln Gly Leu Ala Val	Leu Gly Ile Leu Ile Glu
155	160 165
Val Gly Glu Thr Lys Asn Ile Ala Tyr	Glu His Ile Leu Ser His
170	175 180
Leu His Glu Val Arg His Lys Asp Gln	Lys Thr Ser Val Pro Pro
185	190 195
Phe Asn Leu Arg Glu Leu Leu Pro Lys	Gln Leu Gly Gln Tyr Phe
200	205 210
Arg Tyr Asn Gly Ser Leu Thr Thr Pro	Pro Cys Tyr Gln Ser Val
215	220 225
Leu Trp Thr Val Phe Tyr Arg Arg Ser	Gln Ile Ser Met Glu Gln
230	235 240
Leu Glu Lys Leu Gln Gly Thr Leu Phe	Ser Thr Glu Glu Glu Pro
245	250 255
Ser Lys Leu Leu Val Gln Asn Tyr Arg	Ala Leu Gln Pro Leu Asn
260	265 270
Gln Arg Met Val Phe Ala Ser Phe Ile	Gln Ala Gly Ser Ser Tyr
275	280 285
Thr Thr Gly Glu Met Leu Ser Leu Gly	Val Gly Ile Leu Val Gly
290	295 300
Cys Leu Cys Leu Leu Leu Ala Val Tyr	Phe Ile Ala Arg Lys Ile
305	310 315
Arg Lys Lys Arg Leu Glu Asn Arg Lys	Ser Val Val Phe Thr Ser
320	325 330
Ala Gln Ala Thr Thr Glu Ala	
335	

<210> 424

<211> 18

<212> DNA

<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 424
gtaaagtcgc tggccagc 18

<210> 425
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 425
cccgatctgc ctgctgta 18

<210> 426
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 426
ctgcactgta tggccattat tgtg 24

<210> 427
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 427
cagaaaccca tgatacccta ctgaacaccg aatcccctgg aagcc 45

<210> 428
<211> 1073
<212> DNA
<213> Homo sapiens

<400> 428
aatttttcac cagagtaaac ttgagaaacc aactggacct tgagtattgt 50
acattttgcc tcgtggaccc aaaggtagca atctgaaaca tgaggagtac 100
gattctactg ttttgtcttc taggatcaac tcggtcatta ccacagctca 150
aacctgcttt gggactccct cccacaaaac tggctccgga tcagggaaca 200
ctaccaaacc aacagcagtc aaatcaggtc tttccttctt taagtctgat 250
accattaaca cagatgctca cactggggcc agatctgcat ctgttaaate 300

ctgctgcagg aatgacacct ggtacccaga cccaccatt gaccctggga 350
 gggttgaatg tacaacagca actgcaccca catgtgttac caatttttgt 400
 cacacaactt ggagcccagg gcactatcct aagctcagag gaattgccac 450
 aaatcttcac gagcctcatc atccattcct tgttcccgga aggcatcctg 500
 cccaccagtc aggcaggggc taatccagat gtccaggatg gaagccttcc 550
 agcaggagga gcagggtgaa atcctgccac ccagggaacc ccagcaggcc 600
 gcctcccaac tcccagtggc acagatgacg actttgcagt gaccaccct 650
 gcaggcatcc aaaggagcac acatgccatc gaggaagcca ccacagaatc 700
 agcaaattgga attcagtaag ctgtttcaaa ttttttcaac taagctgcct 750
 cgaatttggg gatacatgtg aatctttatc attgattata ttatggaata 800
 gattgagaca cattggatag tcttagaaga aattaattct taatttacct 850
 gaaaatattc ttgaaatttc agaaaatatg ttctatgtag agaatcccaa 900
 cttttaaaaa caataattca atggataaat ctgtctttga aatataacat 950
 tatgtgcctt ggatgatatg catattaaaa catatttgga aaactggaaa 1000
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1050
 aaaaaaaaaa aaaaaaaaaa aaa 1073

<210> 429
 <211> 209
 <212> PRT
 <213> Homo sapiens

<400> 429
 Met Arg Ser Thr Ile Leu Leu Phe Cys Leu Leu Gly Ser Thr Arg
 1 5 10 15
 Ser Leu Pro Gln Leu Lys Pro Ala Leu Gly Leu Pro Pro Thr Lys
 20 25 30
 Leu Ala Pro Asp Gln Gly Thr Leu Pro Asn Gln Gln Gln Ser Asn
 35 40 45
 Gln Val Phe Pro Ser Leu Ser Leu Ile Pro Leu Thr Gln Met Leu
 50 55 60
 Thr Leu Gly Pro Asp Leu His Leu Leu Asn Pro Ala Ala Gly Met
 65 70 75
 Thr Pro Gly Thr Gln Thr His Pro Leu Thr Leu Gly Gly Leu Asn
 80 85 90
 Val Gln Gln Gln Leu His Pro His Val Leu Pro Ile Phe Val Thr

	95		100		105
Gln Leu Gly Ala	Gln Gly Thr Ile Leu	Ser Ser Glu Glu Leu	Pro		
	110	115	120		
Gln Ile Phe Thr	Ser Leu Ile Ile His	Ser Leu Phe Pro Gly	Gly		
	125	130	135		
Ile Leu Pro Thr	Ser Gln Ala Gly Ala	Asn Pro Asp Val Gln	Asp		
	140	145	150		
Gly Ser Leu Pro	Ala Gly Gly Ala Gly	Val Asn Pro Ala Thr	Gln		
	155	160	165		
Gly Thr Pro Ala	Gly Arg Leu Pro Thr	Pro Ser Gly Thr Asp	Asp		
	170	175	180		
Asp Phe Ala Val	Thr Thr Pro Ala Gly	Ile Gln Arg Ser Thr	His		
	185	190	195		
Ala Ile Glu Glu	Ala Thr Thr Glu Ser	Ala Asn Gly Ile Gln			
	200	205			

<210> 430
 <211> 1257
 <212> DNA
 <213> Homo Sapien

<400> 430
 ggagagaggc gcgcgggtga aaggcgcat gatgcagcct gcggcggcct 50
 cggagcgcgg cggagccaga cgctgaccac gttcctctcc tcggtctcct 100
 ccgctccag ctccgcgctg cccggcagcc gggagccatg cgaccccagg 150
 gccccgcgc ctccccgcag cggctccgcg gcctcctgct gctcctgctg 200
 ctgcagctgc ccgcgccgtc gagcgccctc gagatcccca aggggaagca 250
 aaaggcgag ctccggcaga gggaggtggt ggacctgtat aatggaatgt 300
 gcttacaagg gccagcagga gtgcctggtc gagacgggag ccctggggcc 350
 aatgttattc cgggtacacc tgggatccca ggtcgggatg gattcaaagg 400
 agaaaagggg gaatgtctga gggaaagctt tgaggagtcc tggacacca 450
 actacaagca gtgttcattg agttcattga attatggcat agatcttggg 500
 aaaattgcgg agtgtacatt tacaagatg cgttcaaata gtgctctaag 550
 agttttgttc agtggctcac ttcggctaaa atgcagaaat gcatgctgtc 600
 agcgttggtg tttcacattc aatggagctg aatgttcagg acctcttccc 650
 attgaagcta taatttattt ggaccaagga agccctgaaa tgaattcaac 700

(Faint, illegible text from bleed-through)

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<210> 431
<211> 243
<212> PRT
<213> Homo Sapien
```

```

<400> 431
Met Arg Pro Gln Gly Pro Ala Ala Ser Pro Gln Arg Leu Arg Gly
  1          5          10          15

Leu Leu Leu Leu Leu Leu Leu Gln Leu Pro Ala Pro Ser Ser Ala
    20          25          30

Ser Glu Ile Pro Lys Gly Lys Gln Lys Ala Gln Leu Arg Gln Arg
    35          40          45

Glu Val Val Asp Leu Tyr Asn Gly Met Cys Leu Gln Gly Pro Ala
    50          55          60

Gly Val Pro Gly Arg Asp Gly Ser Pro Gly Ala Asn Val Ile Pro
    65          70          75

Gly Thr Pro Gly Ile Pro Gly Arg Asp Gly Phe Lys Gly Glu Lys
    80          85          90

Gly Glu Cys Leu Arg Glu Ser Phe Glu Glu Ser Trp Thr Pro Asn
    95          100          105

Tyr Lys Gln Cys Ser Trp Ser Ser Leu Asn Tyr Gly Ile Asp Leu
    110          115          120

Gly Lys Ile Ala Glu Cys Thr Phe Thr Lys Met Arg Ser Asn Ser
    125          130          135

```

Ala	Leu	Arg	Val	Leu	Phe	Ser	Gly	Ser	Leu	Arg	Leu	Lys	Cys	Arg
				140					145					150
Asn	Ala	Cys	Cys	Gln	Arg	Trp	Tyr	Phe	Thr	Phe	Asn	Gly	Ala	Glu
				155					160					165
Cys	Ser	Gly	Pro	Leu	Pro	Ile	Glu	Ala	Ile	Ile	Tyr	Leu	Asp	Gln
				170					175					180
Gly	Ser	Pro	Glu	Met	Asn	Ser	Thr	Ile	Asn	Ile	His	Arg	Thr	Ser
				185					190					195
Ser	Val	Glu	Gly	Leu	Cys	Glu	Gly	Ile	Gly	Ala	Gly	Leu	Val	Asp
				200					205					210
Val	Ala	Ile	Trp	Val	Gly	Thr	Cys	Ser	Asp	Tyr	Pro	Lys	Gly	Asp
				215					220					225
Ala	Ser	Thr	Gly	Trp	Asn	Ser	Val	Ser	Arg	Ile	Ile	Ile	Glu	Glu
				230					235					240

Leu Pro Lys

<210> 432
 <211> 18
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 432
 aggacttgcc ctcaggaa 18

<210> 433
 <211> 21
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 433
 cgcaggacag ttgtgaaaat a 21

<210> 434
 <211> 21
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 434
 atgacgctcg tccaaggcca c 21

<210> 435
 <211> 19
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 435
 cccacctgta ccaccatgt 19

 <210> 436
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 436
 actccaggca ccactgttcc tccc 24

 <210> 437
 <211> 19
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 437
 aagggctggc attcaagtc 19

 <210> 438
 <211> 19
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 438
 tgacctggca aaggaagaa 19

 <210> 439
 <211> 21
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 439
 cagccaccct ccagtccaag g 21

 <210> 440
 <211> 19

<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 440
gggtcgtgtt ttggagaga 19

<210> 441
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 441
ctggccctca gaggaccaat 20

<210> 442
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 442
tcctccatca cttcccctag ctcca 25

<210> 443
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 443
ctggcaggag ttaaagttcc aaga 24

<210> 444
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 444
aaaggacacc gggatgtg 18

<210> 445
<211> 26
<212> DNA
<213> Artificial Sequence

1. The first group of people who are not in the majority are the people who are not in the majority.

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<400> 445
agcgtacact ctctccaggc aaccag 26
```

```
<210> 446
<211> 22
<212> DNA
<213> Artificial Sequence
```

<220>
<223> Synthetic oligonucleotide probe

```
<400> 446
caattctgga tgagggtgga ga 22
```

```
<210> 447
<211> 20
<212> DNA
<213> Artificial Sequence
```

<220>
<223> Synthetic oligonucleotide probe

```
<400> 447
caggactgag cgcttgttta 20
```

```
<210> 448
<211> 21
<212> DNA
<213> Artificial Sequence
```

<220>
<223> Synthetic oligonucleotide probe

```
<400> 448
    caaagcgcca agtaccggac c 21
```

```
<210> 449
<211> 18
<212> DNA
<213> Artificial Sequence
```

<220>
<223> Synthetic oligonucleotide probe

<400> 449
ccagacctca gccaggaa 18

```
<210> 450
<211> 18
<212> DNA
<213> Artificial Sequence
```

<220>

<400> 455
caggaaatct ggaaacctac agt 23

<210> 456
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

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